

# ***Standards for the 21<sup>st</sup>-Century Learner in Action***

## **DRAFT 2 for Public Comment**

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# 1. Introduction

Learning in the 21<sup>st</sup> Century has taken on new dimensions with the exponential expansion of information, ever-changing tools, increasing digitization of text, and heightened demands for critical and creative thinking, communication, and collaborative problem solving. To succeed in our rapid-paced, global society, our learners must develop a high level of skills, attitudes and responsibilities. All learners must be able to access high-quality information from diverse perspectives, make sense of it to draw their own conclusions or create new knowledge, and share their knowledge with others.

In recognition of these demands, the American Association of School Librarians has developed standards for the literacy, technology, critical thinking, and information skills that all learners need to acquire. The new standards, entitled *Standards for the 21<sup>st</sup>-Century Learner*, take a fresh approach and a broad perspective on student standards in the school library field by focusing on the learning process, not on the more limited concept of information literacy. These standards lay out underlying common beliefs as well as standards and indicators for essential skills, dispositions, responsibilities, and self-assessment strategies for all learners.

These standards represent high expectations for today's learners, because they will provide the foundation for learning throughout life. The standards and indicators will serve as guideposts for school library media specialists and other educators in their teaching, because these skills and dispositions are most effectively taught as an integral part of content learning.

The focus of these standards is on the learner, but implicit within every standard and indicator is the necessity of a strong school library program that offers a highly-qualified school library media specialist (a term used interchangeably with librarian), equitable access to up-to-date resources, dynamic instruction, and a culture that nurtures reading and learning throughout the school.

## Overview of the Standards

The fact that these standards are focused on academic and personal learning is evident from the flow of learning represented by the standards themselves. The first standard addresses the process of investigating and gaining knowledge. In the second standard, learners are expected to extend that knowledge by drawing their own conclusions, making decisions, applying the knowledge to new situations, and creating new knowledge. In today's interconnected world, learners must go beyond the knowledge they have gained independently, because they are increasingly called upon to collaborate and share their knowledge with others, following ethical guidelines (Standard 3). At the apex of the learning taxonomy is the pursuit of personal and aesthetic growth, the motivation and skills to learn on one's own to satisfy internal needs and interests (Standard 4).

Reading, viewing, and listening comprehension is embedded throughout the standards and indicators. Every learner must be able to go beyond decoding to make sense of text, whether the text is traditional print or nonprint, digital, visual, or oral. Library media specialists understand that the skills of reading, viewing, and listening comprehension may vary according to the type and content of the text, but all fall within the realm of these 21<sup>st</sup>-century standards.

Also integrated throughout the standards and indicators are critical and creative thinking skills. Learners are expected to develop skills and strategies at all cognitive levels, described in the original Bloom's Taxonomy (Knowledge, Comprehension, Application, Analysis, Synthesis, Evaluation) (Bloom, 1956) and in the revised Bloom's Taxonomy (Remember, Understand, Apply, Analyze, Evaluate, Create) (Anderson and Krathwohl, 2001). The highest level in the revised taxonomy, Create, is highlighted in Standard 3, but creative thinking is also essential to standards 1, 2, and 4.

## Overview of the Strands

Four strands of learning are delineated in *Standards for the 21<sup>st</sup>-Century Learner – Skills, Dispositions in Action, Responsibilities, and Self-Assessment Strategies*. Any learning is based on **Skills**; in fact,

national standards in every curriculum area outline some of the skills as well as the content for that discipline. These standards, however, take a broader approach to the learning process. Successful learners have developed not only the skills of learning, but also the dispositions to use the skills. **Dispositions** are the learning behaviors, attitudes, and habits of mind that transform a learner from one who is *able to* learn to one who actually *does* learn. Dispositions can be taught by structuring assignments and learning environments so that they require persistence, flexibility, divergent thinking or any other learning behavior. They can be assessed through documentation that the student has followed the behavior during his learning process. For example, the student may be asked to document his critical stance by evaluating the information he found on the right side of two-column notes.

**Responsibility** is the third strand included in the standards. The goal of any educational system is that students will emerge as responsible and productive members of society. For that to happen, students must be taught responsibility over the years of schooling. Probably the most effective method of teaching responsibility is to follow a process of gradual release of responsibility, in which the teacher assumes a strong, guiding role at first and then gradually transfers that responsibility to the student as the student develops the capacity to assume it. For example, students who are expected to respect copyright/intellectual property rights must learn through a series of experiences how to avoid plagiarism and the importance of relying on their own thinking.

The fourth strand is **Self-Assessment Strategies** in recognition of the importance of self-regulation in any learning process. Learners must be able to look at their own work to determine the quality, discover gaps in their own thinking, ask questions to lead to further investigation, find areas that need revision or rethinking, recognize their new understandings, and determine when they need to ask for help. The metacognitive aspects of self-assessment lead to higher levels of thinking and self-monitoring. Self-assessment complements but does not replace assessment by the library media specialist and classroom teacher.

All four strands are integral to successful learning, but all do not have to be targeted in every instructional experience. Dispositions, responsibilities, and self-assessment strategies are not tied to specific standards (unlike the skills), although some naturally align themselves with specific phases of the learning process. These three strands are also not grade-level specific; instead they must be developed over time through many experiences.

## Teaching to the Standards

Library media specialists and classroom teachers will find that a collaborative approach to teaching to these standards is most effective, because process skills are best learned in the context of content learning and content is most effectively learned when the necessary learning skills are taught at the same time. Library media specialists should not allow difficulties in collaboration (when they cannot find willing partners or the time to collaborate) to block their teaching of these necessary skills and dispositions. The *Action Examples* in the latter part of this publication include samples of instruction in the library at all levels of collaboration.

Any information processing/research/inquiry model can be used as the structure for the learning process because all of the models have essentially the same phases, as outlined in the standards and indicators themselves. The underlying assumption of these standards is that the only way for learners to develop the skills and dispositions of learning is for them to be given opportunities to construct their own understanding and develop the skills through guided practice. Library media specialists will want to offer direct instruction on the targeted skill, but then scaffold the learning experience so that students are challenged to perform the skill with guidance and then on their own.

Students with special needs and English Language Learners should be expected to learn these skills and given additional support in order to do so. The social nature of learning, that all learning is co-created, may be particularly valuable for differentiating instruction. Students can be strategically paired and grouped and the learning experiences structured so that students have multiple, scaffolded experiences to learn a skill by interacting with others. Integrating all learning modalities (reading, writing, speaking, listening, viewing, and representing) is also helpful for students with different learning needs.

Assessment is an important component to these standards. Library media specialists have the opportunity to include all three forms of assessment (diagnostic, formative, and summative) into their instruction. Diagnostic assessment, conducted before the learning experience, will reveal students' pre-existing level of knowledge and skills as well as their misconceptions. Instruction can be adapted to address the diagnostic findings. Formative assessment is easily integrated into any lesson, because when students produce work, it can be assessed for understanding and quality. Library media specialists can tell from working, annotated bibliographies, for example, whether or not students understand how to evaluate sources and select sources relevant to their research questions. Formative assessment is especially valuable for determining students' understanding of process skills, because those skills are more evident in the day-to-day work than in the final product. Summative assessment, or assessment of the final product, is also useful depending on the skills taught during the unit. If the targeted skill is generating good research questions, the quality of the questions will be more evident from looking at the questions themselves than from looking at the final paper. Rubrics to evaluate final products should include process skills as well as content.

## **Standards in Action**

This publication, *Standards for the 21st Century Learner in Action*, provides support for school library media specialists and other educators in teaching the essential learning skills defined in *Standards for the 21<sup>st</sup> Century Learner*. In the latter sections, it presents Action Examples for putting the *Standards* into practice, divided into grade-level sections by Benchmark Grades 2, 5, 8, 10 and 12.

The Action Examples are just that – examples. They are designed to give a picture of how a lesson or unit might be designed to teach specific skills, dispositions, and responsibilities in the various situations in which library media specialists have to operate, from a fully designed collaborative unit to a single lesson taught in the library in a 30-minute time span. Each Action Example is based on a scenario that describes very real situations in which library media specialists teach. Each instructional opportunity has merit in helping all our students reach the *Standards for the 21<sup>st</sup>-Century Learner*.

## 2. Skills

### Defining Skills in 21<sup>st</sup> Century Learning

The demands of the 21<sup>st</sup> century require learners to develop essential information and literacy (reading, writing, speaking, listening, viewing, and presenting) skills in order to evaluate and make sense of the rapidly proliferating, but often biased and inaccurate, volume of information being published. The “text” of information is presented in many different formats, and learners must develop the skills of multiple literacies (print, digital, media, visual) to determine the intended meaning and to understand it in context. In addition, learners must use critical and creative thinking skills to transform the information that they gather into organized knowledge that they can use to make decisions, draw conclusions, and create new knowledge. Learners must develop social learning skills as well, so that they can learn from the diverse perspectives of others and participate productively in their community of learners.

Although schools may define a body of knowledge for students to acquire during their educational experience, no learner will be prepared for successful participation in school or society without also developing the skills of learning and the ability to adapt those skills to any context and for any reason, both academic and personal.

### Skills and the Learning Process

Implicit within *Standards for the 21<sup>st</sup>-Century Learner* is inquiry, defined as a stance toward learning in which the learner himself is engaged in asking questions and finding answers, not simply accumulating facts presented by someone else that have no relation to previous learning or new understanding. Inquiry follows a continuum of learning experiences, from simply discovering a new idea or an answer to a question to following a complete inquiry process. A number of inquiry-process models include the same progression. Learners begin by recognizing what they already know and acquiring enough background information to generate questions for investigation. Using their questions to frame their investigations, learners apply the skills needed to determine accurate answers, generate new ideas and interpretations, and make appropriate decisions and conclusions. To complete the inquiry cycle, students express their new understandings, apply them to new situations, and reflect on their own learning process.

The skills required for inquiry run the gamut between low-level, fact-location skills and high-level synthesis, evaluation, and creation skills. Students of all ages should be expected to think while they are learning; thinking is not a luxury reserved for the most-skilled or older students. In all cases, however, students should apply the thinking and inquiry skills in the context of some content that they are learning. The skills will enhance the learning of content; the content will make the learning of skills more meaningful and important.

### Teaching for Skills

The skills for 21<sup>st</sup>-century learning are best taught through an approach in which the teacher guides the learners to construct their own understandings and their application to any learning experience. One model of instruction that has been used successfully (because it combines direct instruction with independent practice) is a four-step lesson design: direct instruction of the specific skill to be learned (in context of a topic being studied); modeling and guided practice so that learners have an opportunity to see the skill as it is applied successfully; independent practice with learners applying the skill to their own topics; and reflection and sharing when the learners look at their own application of the skill and determine how well it worked.

The acquisition of learning skills is complex and developmental. Students cannot be expected to learn every skill necessary to complete every phase of the learning process on each unit of instruction. Library media specialists and teachers guide students to successful learning experiences by teaching identified skills and scaffolding other necessary skills. For example, if a library media specialist has decided to teach students to evaluate Web sites during one particular unit, then the library media specialist may choose to provide the sites to be evaluated rather than teaching students to develop search strategies and skills. The development of search strategies would be taught during another unit.

Because the skills of 21<sup>st</sup>-century learning must be developed over time, library media specialists may want to design a curriculum plan for teaching the skills in a coherent way across the years of schooling. This plan must be integrated with content-area curricula to match appropriate skills with classroom content and ensure that the skills are always taught in context. Sample integrated lessons for many of the skills are included in the latter part of this publication in the Action Examples.

The following charts show a developmental approach to each of the skills covered in the four standards.

<b>Standard 1: Inquire, think critically, and gain knowledge.</b>	
<b>Strand 1.1: Skills</b>	
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Independently and systematically use an inquiry-based process to deepen content knowledge, connect academic learning with the real world, pursue personal interests, and investigate opportunities for personal growth.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Use an inquiry-based process for deepening content knowledge, connecting academic learning with the real world, pursuing personal interests, and investigating opportunities for personal growth.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Frame independent learning activities, whether personal or academic, around a critical-thinking process that involves asking questions, investigating the answers, and developing new understandings.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Follow a process whenever pursuing new information through inquiry or research.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Follow a modeled inquiry process during each visit to the library to do research.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Explore problems or questions for which there are multiple answers or no “best” answer.</li> <li>Explore general information sources to increase familiarity with the topic.</li> <li>Review the initial information need to develop, clarify, revise, or refine the question.</li> <li>Compare new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Read background information to discover the key components of the problem or question.</li> <li>Identify key words or synonyms, both stated and implied, to use them in further research.</li> <li>Develop a schema or mind map to express the big idea and the relationships among supporting ideas and topics of interest.</li> <li>Develop and refine the topic, problem, or question independently to arrive at a worthy and manageable topic.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>State and verify what is known about the problem or question and make connections to prior knowledge.</li> <li>Revise the question or problem as needed to arrive at a manageable topic.</li> <li>Observe and analyze an experience, demonstration, or source that introduces a topic, problem, or question to gather background information.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Connect ideas in text to own interests.</li> <li>Generate a list of key words for a research-based project with guidance.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use sources to acquire background information.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Connect ideas to own interests.</li> <li>• Share what is known about the general topic to elicit and make connections to prior knowledge.</li> <li>• Identify one or two key words about a topic, problem, or question.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Recognize that the purpose of the inquiry determines the type of questions and the type of thinking required (e.g., an historical purpose may require one to take a position and defend it).</li> <li>• Develop a thesis statement and formulate questions based on the information need.</li> <li>• Review the initial information need to clarify, revise, or refine the questions.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Focus the purpose of the research by formulating specific questions to be answered.</li> <li>• Refine questions to provide a framework for the inquiry and to fulfill the purpose of the research.</li> <li>• Analyze what is already known or what is observed or experienced to form tentative thesis or hypothesis to predict answers to inquiry questions.</li> <li>• Plan inquiry to test hypothesis systematically or to validate thesis.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Write questions independently based on key ideas or areas of focus.</li> <li>• Determine what information is needed to support the investigation and answer the questions.</li> <li>• Analyze what is already known or what is observed or experienced to predict answers to inquiry questions.</li> <li>• Refine questions that lead to gathering of different types of information (e.g., overview, big-idea, specific detail, cause and effect, comparison).</li> <li>• Plan inquiry to answer questions.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Formulate questions about the topic with guidance.</li> <li>• Predict answers to inquiry questions based on background knowledge and beginning observation or experience.</li> <li>• Assess questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Formulate questions related to listening activities.</li> <li>• Ask “I wonder” questions about the research topic.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Identify the value of and differences among potential resources in a variety of formats.</li> <li>• Use various search systems to retrieve information in a variety of formats.</li> <li>• Describe criteria used to make resource decisions and choices.</li> <li>• Seek and use a variety of specialized resources available from libraries, the Internet, and the community.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Consider and prioritize possible sources of information based on specific information needs and strengths of different information formats.</li> <li>• Use specialized reference materials to find specific and in-depth information.</li> <li>• Use both primary and secondary sources.</li> </ul>

	<ul style="list-style-type: none"> <li>Evaluate sources based on criteria such as copyright date, authority of author or publisher, depth of coverage, and relevance to research questions.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Recognize the organization and use of special sections in the library (e.g., reference, reserve books, paperbacks).</li> <li>Use the categorization of materials in Dewey areas up to the first decimal point to locate appropriate materials.</li> <li>Evaluate sources based on criteria such as copyright date, authority of author or publisher, comprehensiveness, readability, and alignment with research needs.</li> <li>Select a variety of credible sources in different formats relevant to research needs.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Understand the 10 major Dewey areas and what main topics are included in each.</li> <li>Use text features and illustrations to decide which resources are best to use and why.</li> <li>Select and use appropriate sources, including specialized reference sources and periodical databases, to answer questions.</li> <li>Use multiple resources, including print, electronic, and human, to locate information.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Understand the basic organizational structure of books.</li> <li>Distinguish between fiction and nonfiction books.</li> <li>Associate Dewey numbers with areas of interest.</li> <li>Select and use appropriate sources, including picture dictionaries, beginning encyclopedias, magazines, maps, and globes, to answer questions.</li> </ul>
<b>Indicator 1.1.5:</b> Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Recognize that knowledge can be organized into disciplines that influence the way information is presented and use this understanding to effectively access information.</li> <li>Use consciously selected criteria to determine whether the information contradicts or verifies information from other sources.</li> <li>Recognize the social, cultural, or other context within which the information was created and explain the impact of context on interpreting the information.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Evaluate and select information based on authority, accuracy, point of view, and reliability.</li> <li>Evaluate historical information for validity of interpretation, and scientific information for accuracy and reliability of data.</li> <li>Determine the extent of the research by the complexity of the subject, not by time or page limits.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Evaluate and select information based on usefulness, currency, accuracy, authority, and point of view.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Use skim/scan to locate information that is appropriate to age and ability level.</li> <li>Use the organizational structure of a book (e.g., table of contents, index, chapter headings) to locate information to answer questions.</li> <li>Interpret information taken from maps, graphs, charts and other visuals.</li> <li>Distinguish between fact and opinion.</li> <li>Evaluate facts for accuracy.</li> <li>Determine important and unimportant details.</li> <li>Identify facts and details that support main ideas.</li> <li>Select information to answer questions or solve a problem.</li> </ul>



Grade 2	<ul style="list-style-type: none"> <li>Recognize facts.</li> <li>Find facts that answer specific questions.</li> <li>Interpret information represented in pictures, illustrations, and simple charts.</li> </ul>
<b>Indicator 1.1.6:</b> Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Restate text resource's concepts in own words and select appropriate data accurately.</li> <li>Integrate new information with previous information or knowledge.</li> <li>Create a system to organize the information.</li> <li>Extend initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses or generalizations that may require additional information.</li> <li>Challenge ideas represented and make notes of questions to pursue in additional sources.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Take notes using one or more note-taking strategies, including reflecting on the information (e.g., graphic organizers, two-column notes).</li> <li>Categorize information; add new categories as necessary.</li> <li>Interpret information.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Evaluate, paraphrase, and summarize information.</li> <li>Use both facts and opinions responsibly by identifying and verifying them.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).</li> <li>Paraphrase or summarize information.</li> <li>Draw conclusions based on facts and premises.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Use simple note-taking strategies as demonstrated by librarian.</li> <li>Write, draw or verbalize the main idea and supporting details.</li> </ul>
<b>Indicator 1.1.7:</b> Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Analyze the structure and logic of supporting arguments or methods.</li> <li>Analyze information for prejudice, deception, or manipulation.</li> <li>Investigate different viewpoints encountered and determine whether and how to incorporate or reject these viewpoints.</li> <li>Compensate for the effect of point of view and bias on all information available in the public domain by seeking alternative perspectives.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Recognize degrees of bias and the effect on the information presented.</li> <li>Counter the effect of bias on the accuracy and reliability of information by actively pursuing a balanced perspective.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Seek a balanced point of view by using diverse sources.</li> <li>Recognize the effect of different perspectives (points of view) on the information.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Recognize when facts from two different sources conflict and seek additional sources to verify accuracy.</li> <li>Recognize own misconceptions when new information conflicts with previously held opinions.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Summarize or retell key points.</li> </ul>

**Indicator 1.1.8:** Demonstrate mastery of technology tools for accessing information and pursuing inquiry.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Select the most appropriate technologies to access and retrieve the needed information.</li> <li>• Use various technologies to organize and manage the information selected.</li> <li>• Create own electronic learning spaces by collecting and organizing links to information resources, working collaboratively, and sharing new ideas and understandings with others.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use a range of electronic resources efficiently, effectively, and safely by applying a variety of search and evaluation strategies.</li> <li>• Use social tools to demonstrate and share learning.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Incorporate technology resources such as online encyclopedias, online databases, and Web subject directories, to locate information.</li> <li>• Implement key word search strategies.</li> <li>• Select and use grade-level appropriate electronic reference materials and teacher-selected Internet sites to answer questions.</li> <li>• Use a variety of search engines to do advanced searching.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Search an online catalog to locate materials.</li> <li>• Use selected Websites and periodical databases to find appropriate information.</li> <li>• Use selected search engines to find appropriate information.</li> <li>• Use software or online tools (e.g., word processing, wikis, graphic organizers) to record and organize information.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Recognize the purpose of the online catalog to locate materials.</li> <li>• Use online encyclopedias and magazine databases with guidance.</li> </ul>

**Indicator 1.1.9:** Collaborate with others to broaden and deepen understanding.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Model social skills and character traits that advance a team's ability to identify issues and problems and work together on solutions and products.</li> <li>• Design and implement projects that include participation from diverse groups.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Seek ideas and opinions from others.</li> <li>• Respect and help groups find and incorporate diverse ideas.</li> <li>• Describe ideas of others accurately.</li> <li>• Help to organize and integrate contributions of all group members in to products.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Work together in self-managed teams to understand concepts and to solve problems.</li> <li>• Offer information and opinion at appropriate times in group discussions.</li> <li>• Encourage team members to share ideas and opinions.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Contribute to project teams in producing original works or solve problems.</li> <li>• Respect others' opinions through active listening and questioning.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Listen to others with respect.</li> <li>• Share knowledge and ideas with others by discussion and listening.</li> </ul>

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

**Strand 2.1: Skills**

**Indicator 2.1.1:** Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Build a conceptual framework by synthesizing ideas gathered from multiple texts.</li> <li>• Resolve conflicting evidence or clarify reasons for differing interpretations of information and ideas.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Identify main, supporting, and conflicting information using multiple sources to support interpretation or point of view.</li> <li>• Make and explain inferences about main ideas.</li> <li>• Critically examine and analyze relevant information from a variety of sources to discover relationships and patterns among ideas.</li> <li>• If discrepancy in points of view is discovered, continue research until it is resolved.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Compare and contrast information found in different sources.</li> <li>• Assess the importance of ideas by comparing their treatment across texts.</li> <li>• Identify main ideas and find supporting examples, definitions, and details.</li> <li>• Analyze different points of view discovered in different sources.</li> <li>• Determine patterns and discrepancies by comparing and combining information available in different sources.</li> <li>• Interpret information and ideas by defining, classifying, and inferring from information in text.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use different clues (placement in text, signal words, focal point of illustration) to determine important ideas in illustrations and text.</li> <li>• Identify facts and details that support main ideas.</li> <li>• Restate and respond with detailed answers to factual questions.</li> <li>• Find similar big ideas in more than one source.</li> <li>• Question the differences between sources and seek additional sources to resolve.</li> <li>• Make inferences with guidance.</li> <li>• Analyze and evaluate new information based on previous experience and knowledge.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Find facts to answer questions in more than one source.</li> <li>• Write, draw, or verbalize supporting details.</li> <li>• Note similarities and differences in information from different sources.</li> <li>• Answer the question, "What is this mostly about?"</li> </ul>

**Indicator 2.1.2:** Organize knowledge so that it is useful.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Organize information independently, deciding the structure based on the relationships among ideas and general patterns discovered.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use different organizational patterns as appropriate for point of view and conclusions (cause and effect, hierarchy, chronology, compare/contrast). Experiment with devising own organizational structure.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Combine and categorize information by using an outline or semantic web to find connections among ideas.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use common organizational patterns to organize information (chronological order, cause and effect, compare/contrast) in order to draw conclusions.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Organize notes and ideas to form responses to questions</li> <li>• Organize the information in a way that is appropriate for the assignment or question.</li> <li>• Use common organizational patterns to make sense of information (chronological order, main idea with supporting ideas).</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Demonstrate simple organizational skills such as sorting and categorizing.</li> <li>• Organize information into different forms (charts, drawings).</li> </ul>

**Indicator 2.1.3:** Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>• Combine information and inferences to draw conclusions and create meaning.</li> <li>• Develop own point of view and support with evidence.</li> <li>• Present different perspectives with evidence for each.</li> <li>• Apply new knowledge to real-world issues and problems.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Identify when information does not support tentative thesis or hypothesis; gather additional information or revise thesis/hypothesis.</li> <li>• Draw clear and appropriate conclusions supported by evidence and examples.</li> <li>• Combine ideas and information to develop and demonstrate new understanding.</li> <li>• Recognize multiple causations for same issues or events.</li> <li>• Apply strategies for making personal and real world connections with information.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Review ideas held at beginning of inquiry and reflections captured during note-taking.</li> <li>• Reflect on how ideas changed with more information.</li> <li>• Compare information found to tentative thesis or hypothesis; revisit or revise hypothesis as appropriate.</li> <li>• Draw conclusions based on explicit and implied information.</li> <li>• Form opinions and judgments backed up by supporting evidence.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Review ideas held at beginning of inquiry and reflections captured during note-taking.</li> <li>• Match information found with questions and predictions.</li> <li>• Make inferences about the topic at the conclusion of a research project.</li> <li>• Draw a conclusion about the main idea.</li> <li>• Identify connections to the curriculum and real world.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Revisit and complete K-W-L or other graphic organizer using the new ideas that were learned during the inquiry experience.</li> <li>• Compare new ideas with what was known at the beginning of the inquiry.</li> <li>• Make inferences regarding the topic at the conclusion of a theme or research project with guidance.</li> <li>• Draw a conclusion about the main idea with guidance.</li> </ul>

**Indicator 2.1.4:** Use technology and other information tools to analyze and organize information.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>• Determine important connections among ideas by using common productivity software to categorize and analyze information.</li> <li>• Use presentation and production software available locally and through the</li> </ul>

	interactive Web to enhance creativity in organizing and presenting information for better communication to others.
Grade 10	<ul style="list-style-type: none"> <li>• Use technology tools (including Web 2.0 tools) to create the most appropriate organizational pattern to express connections and patterns.</li> <li>• Identify and apply common productivity software (e.g., use features such as spellchecker and thesaurus to ensure accuracy of word-processing documents; use formulas and create charts in spreadsheets; and insert pictures, movies, sound and charts in presentation software) to enhance communication to an audience, promote productivity and support creativity).</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Identify and apply common productivity software and features such as menus and toolbars to plan, create, and edit word processing documents, spreadsheets, and presentations.</li> <li>• Use interactive Web 2.0 tools to participate as a group in analyzing and organizing information.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use word processing, drawing tools, presentation software, graphing software, and other productivity software to illustrate concepts and convey ideas.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Use word processing and drawing tools to create written product.</li> </ul>
<b>Indicator 2.1.5:</b> Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Collaborate locally and remotely with peers, experts, and others to collect, produce, and share information.</li> <li>• Work with others to find solutions to problem solving situations.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Participate in discussion to analyze information problems and to suggest solutions.</li> <li>• Work with others to select, organize, and integrate information and ideas from a variety of sources and formats.</li> <li>• Use online environments or other collaborative tools to facilitate design and development of materials, models, publications, and presentations,</li> <li>• Apply utilities to edit pictures, images, and charts; complying with all copyright provisions.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Participate in problem solving process with group.</li> <li>• Work collaboratively to use technology for research to meet information needs.</li> <li>• Work in groups to create and evaluate products that communicate information and ideas.</li> <li>• Work in groups to import and manipulate pictures, images, and charts in word-processing documents, spreadsheets, presentations, Web pages, blogs, and other creative works, paying attention to copyright provisions.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Express own ideas appropriately and effectively while working in groups to identify and resolve information problems.</li> <li>• Create individual or collaborative projects to share with others.</li> <li>• Work in groups to create and evaluate information products.</li> <li>• Work in groups to create pictures, images, and charts for development of word-processing reports and electronic presentations.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Share information and ideas with others by discussion and listening.</li> <li>• Create individual or collaborative projects to share with others.</li> <li>• Work in groups to create and evaluate simple information products (poster, diorama).</li> </ul>
<b>Indicator 2.1.6:</b> Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.	

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>• Use the most appropriate format, tone, and language to communicate ideas clearly to different audiences.</li> <li>• Create products for authentic reasons.</li> <li>• Keep track of all ideas used from other sources and cite ideas and direct quotes according to style formats.</li> <li>• Employ a variety of strategies for revising and reviewing own work.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use pre-writing to discover most effective way to present conclusions.</li> <li>• Decide presentation form based on effective communication of point of view or purpose.</li> <li>• Draft the presentation/product to present argument, point of view, interpretation, or new model most effectively with supporting evidence.</li> <li>• Create maps, charts, tables, diagrams, graphs, and other formats to present ideas and information.</li> <li>• Expand formats to include multimedia, e-mail, software, podcasts, blogs, wikis, Web pages, spreadsheets and databases.</li> <li>• Revise based on self-assessment, teacher feedback, and peer feedback.</li> <li>• Edit for grammar, language conventions, and style</li> <li>• Cite all sources used according to style formats.</li> <li>• “Publish” final product.</li> <li>• Evaluate the product and process throughout the work and make revisions when necessary.</li> <li>• Express own ideas through creative products in a variety of formats</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Use pre-writing to discover alternate ways to present conclusions.</li> <li>• Decide presentation form based on audience and purpose.</li> <li>• Use information to create original and creative products.</li> <li>• Draft the presentation/product following a semantic web or outline and add supporting details from notes.</li> <li>• Communicate both main and supporting points in the product.</li> <li>• Follow and build on revision strategies suggested by teacher or librarian.</li> <li>• Edit for grammar and language conventions.</li> <li>• Cite all sources used.</li> <li>• Assess own product and develop a few ideas for improvement.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use pre-writing to brainstorm ideas for most effective way to present conclusions.</li> <li>• Determine audience before creating product.</li> <li>• Draft the presentation/product following an outline of ideas and add supporting details.</li> <li>• Create a product with a beginning, middle, and end.</li> <li>• Use strategies for revision outlined by teacher or librarian.</li> <li>• Modify and revise own work based on feedback from others.</li> <li>• Check for correctness and completeness.</li> <li>• Cite all sources used according to model provided by teacher or librarian.</li> <li>• Select and present creative products in a variety of formats.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Follow steps of writing process modeled by librarian or teacher: pre-writing, drafting, revising, editing, publishing.</li> <li>• Begin to understand concept of “audience.”</li> <li>• Use basic grammar conventions.</li> <li>• Identify the names of sources used.</li> <li>• Make changes based on teacher/librarian feedback and suggestions.</li> <li>• Use multiple intelligences to create end products.</li> </ul>

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

**Strand 3.1: Skills**

**Indicator 3.1.1:** Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Present complex ideas with clarity and authority.</li> <li>• Present original conclusions effectively.</li> <li>• Identify own strengths, assess own inquiry process and product, and set goals for improvement.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Present conclusions to answer the question or problem.</li> <li>• Set high and clear standards for work and develop criteria for self-assessment or use established criteria (rubrics, checklists).</li> <li>• Assess own work and establish own revision strategies.</li> <li>• Follow own research plan and evaluate effectiveness of inquiry process.</li> <li>• Reflect at the end of an inquiry process to identify additional areas of personal interest for pursuit in the future.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Present conclusions and supporting facts in a variety of ways.</li> <li>• Present solutions to problems using modeled examples.</li> <li>• Use maps, drawings, illustrations, graphs, and charts to communicate meaning.</li> <li>• Identify, with guidance, skills that require practice and refinement.</li> <li>• Modify and revise own work based on feedback from others.</li> <li>• Follow plan of work but seek ideas for improving the process.</li> <li>• Reflect at the end of an inquiry process to identify additional areas of personal interest for pursuit in the future.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Present information clearly so that main points are evident.</li> <li>• Use information appropriate to task and audience.</li> <li>• Identify and evaluate the important features for a good product.</li> <li>• Identify own strengths and set goals for improvement.</li> <li>• Reflect at the end of an inquiry experience about what ideas would still be interesting to pursue.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Present facts and simple answers to questions.</li> <li>• Use simple rubrics to assess work.</li> <li>• Identify own strengths and set goals for improvement.</li> <li>• Reflect at the end of an inquiry experience about new ideas to wonder about and investigate.</li> </ul>

**Indicator 3.1.2:** Participate and collaborate as members of a social and intellectual network of learners.

**Grade-Level Benchmarks**

Grade 12	<ul style="list-style-type: none"> <li>• Offer and defend information brought to group.</li> <li>• Seek consensus from a group, when appropriate, to achieve a stronger product.</li> <li>• Help to organize and integrate contributions of all group members into products.</li> <li>• Use technology tools to collaborate, publish, and interact with peers, experts, and other real-world audiences.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Seek ideas and opinions from others.</li> <li>• Respect and help groups find and incorporate diverse ideas.</li> <li>• Describe or summarize ideas of others accurately and respond appropriately.</li> </ul>



	<ul style="list-style-type: none"> <li>• Seek alternative sources of information and respect the guidelines for access in all environments (public libraries, museums, cultural institutions, agencies).</li> <li>• Recognize that equitable access to information depends on student responsibility.</li> <li>• Share reading experiences and favorite literature to build a relationship with others.</li> <li>• Use interactive tools/Web sites to collaborate, publish, and interact with peers, experts, and other audiences.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Collaborate with others to design a product or solve a problem.</li> <li>• Share research and creative products with others.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Offer information and opinions at appropriate times in group discussions.</li> <li>• Encourage team members to share ideas and opinions.</li> <li>• Ask questions of others in a group to elicit their information and opinions.</li> <li>• Describe or summarize ideas of others accurately.</li> <li>• Practice responsible and ethical use of information resources, both in own library and in other institutions.</li> <li>• Share reading experiences and favorite literature to build a relationship with others.</li> <li>• Use interactive tools (e.g., e-mail, discussion groups, listservs, blogs, wikis, portals) to exchange data collected and to learn curricular concepts by communicating with peers, experts, and other audiences.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Collaborate with others to design a product or solve a problem.</li> <li>• Share research and creative products with others.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Show respect for and respond to ideas of others.</li> <li>• Describe or restate ideas of others accurately.</li> <li>• Acknowledge personal and group achievements.</li> <li>• Rely on feedback to improve product and process.</li> <li>• Respect the guidelines for responsible and ethical use of information resources.</li> <li>• Share favorite literature.</li> <li>• Develop projects that can be shared electronically and can challenge other students to answer questions or give opinions adding to the content (e.g., shared book reviews, shared PowerPoint presentations).</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Develop a product with peers.</li> <li>• Share research and creative products with others.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Participate in discussions and listen well.</li> <li>• Show respect for the ideas of others.</li> <li>• Give positive feedback.</li> <li>• Respect rules and procedures as responsible library users.</li> <li>• Share favorite literature, both fiction and nonfiction.</li> <li>• Participate in discussions on fiction and nonfiction related to curriculum.</li> <li>• Begin to create collaborative projects.</li> <li>• Share research and creative products with others, using diverse formats, both print and non-print.</li> </ul>
<b>Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Employ organizational and presentation structures [e.g., narrative essays, poems, debates] using various formats to achieve purpose and clarify meaning.</li> <li>• Give a presentation to support a position on a specified topic and respond to</li> </ul>



	<p>questions from the audience.</p> <ul style="list-style-type: none"> <li>• Use language that shows authority and knowledge of topic.</li> <li>• Present ideas and conclusions to audiences beyond the school.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use an organizational structure that effectively connects ideas and creates the desired intent.</li> <li>• Use the most appropriate format, tone and language to communicate ideas and point of view clearly to different audiences.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Present conclusions so that main ideas are clearly stated and supported by evidence.</li> <li>• Use relevant ideas and details to show insight into people, events, new knowledge, and personal background.</li> <li>• Use dramatic, audio, and video presentation as appropriate for subject and audience.</li> <li>• Adjust pacing, volume, and intonation appropriate to content and purpose.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use significant details and relevant information to develop meaning.</li> <li>• Present information coherently in oral, written, and visual sequence.</li> <li>• Use clear and appropriate vocabulary to convey the intended message.</li> <li>• Speak clearly to convey meaning.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Choose and maintain a focus in a piece of writing.</li> <li>• Add details from personal experience and research to support ideas.</li> <li>• Present information and main ideas in a variety of ways (e.g., art, music, podcast, poetry, movement, verbally, and/or written language).</li> </ul>
<b>Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Prepare and deliver a “professional” presentation to audience outside of school using technology as medium of presentation.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use a variety of media and formats to communicate information and ideas effectively to multiple audiences.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Use appropriate media and formats to design and develop products that clearly and coherently display new understanding.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use different technology tools for research to meet information needs.</li> <li>• Use a variety of media and formats to create and edit products that communicate syntheses of information and ideas to multiple audiences.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Begin to use technology to meet information needs.</li> <li>• Use a variety of developmentally appropriate media to communicate ideas relevant to the curriculum, classmates, families, and others.</li> </ul>
<b>Indicator 3.1.5: Connect learning to community issues.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Investigate multiple sides of issues and evaluate them carefully, particularly on controversial or culturally based topics.</li> <li>• Connect learning to real-world issues.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use multiple resources to seek balanced perspectives.</li> <li>• Find authentic connections of inquiry topic to real world.</li> <li>• Demonstrate understanding of intellectual freedom and First Amendment rights.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Use real-world examples to establish authenticity.</li> <li>• Identify and address community and global issues.</li> <li>• Understand the concept of balanced points of view and seek information from</li> </ul>

	<div>diverse sources to get balanced view.</div> <ul style="list-style-type: none"> <li>Find information on both sides of a question.</li> <li>Respect the principles of intellectual freedom.</li> <li>Articulate the importance of intellectual freedom to a democratic society.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Gather ideas and information from different points of view.</li> <li>Base opinions on information from multiple sources of authority.</li> <li>Recognize the value of freedom of speech.</li> <li>Connect ideas and information to situations and people in the larger community.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Find personal connection to inquiry topic.</li> <li>Identify a real-world need and pursue questions and answers about it.</li> </ul>
<b>Indicator 3.1.6: Use information and technology ethically and responsibly.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>Analyze the consequences and costs of unethical use of information and communication technology (e.g., hacking, spamming, consumer fraud, virus setting, intrusion); identify ways of addressing those risks.</li> <li>Demonstrate understanding for the process of copyrighting own work.</li> <li>Use programs and Internet sites responsibly, efficiently, and ethically.</li> <li>Serve as a mentor for others who want to use information technology.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Express opinions in an appropriate manner; respect ideas of others.</li> <li>Understand what constitutes plagiarism and refrain from representing work attributable to others as their own.</li> <li>Give credit for all quotes, citing them properly in notes and bibliography.</li> <li>Discuss issues related to acceptable and responsible use of information and communication technology (e.g., privacy, security, copyright, file sharing, plagiarism).</li> <li>Respect privacy of others (e-mail, files, passwords, book checkout, Web sites visited).</li> <li>Legally obtain, store, and disseminate text, data, images, or sounds.</li> <li>Abide by the Acceptable Use Policy in all respects and use Internet responsibly and safely.</li> <li>Explain First Amendment rights and the process available to defend them.</li> <li>Understand concept and role freedom of information plays in democracy.</li> <li>Demonstrate understanding of intellectual freedom and intellectual property rights by respecting and observing guidelines for using information sources.</li> <li>Promote and defend the rights of others.</li> <li>Either put all information in own words or select short segments to quote.</li> <li>Extend respect for intellectual property rights and copyright by giving credit for ideas as well as directly quoted material.</li> <li>Demonstrate awareness and understanding of fair use guidelines for educational purposes.</li> <li>Make copies or downloads of print, software, or audio only when permission from author/publisher has been obtained or purchase has been made.</li> <li>Follow school guidelines related to use of technology.</li> <li>Observe Internet safety procedures including safeguarding personal information.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Respect ideas of others.</li> <li>Express opinions in an appropriate manner; respect ideas of others.</li> <li>Avoid plagiarism by rephrasing information in own words.</li> <li>Document quotations and cite sources using correct bibliographic format.</li> <li>Observe Internet safety procedures including safeguarding personal information.</li> <li>Respect privacy of others (e-mail, files, passwords, book checkout, Web sites visited).</li> </ul>

	<ul style="list-style-type: none"> <li>• Follow school guidelines related to use of technology.</li> <li>• Abide by Acceptable Use Policy by accessing only appropriate information.</li> <li>• Use programs and Internet sites responsibly and ethically.</li> <li>• Understand concept and role freedom of information plays in democracy.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Respect ideas of others.</li> <li>• Examine the concept of freedom of speech.</li> <li>• Express own opinion in an appropriate manner.</li> <li>• Answer research questions with words and phrases from sources, but not by copying whole sentences.</li> <li>• Understand the concept of plagiarism. Understand that authors and illustrators own their writings and art and it is against the law to copy their work.</li> <li>• Credit all sources properly with title, author, and page number.</li> <li>• Follow school guidelines related to use of technology.</li> <li>• Observe Internet safety procedures including safeguarding personal information.</li> <li>• Practice responsible use of technology and describe personal consequences of inappropriate use.\</li> <li>• Respect privacy of others (e-mail, files, passwords, book checkout).</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Respect ideas of others.</li> <li>• Recognize the right to express own opinion in an appropriate manner.</li> <li>• Answer research questions with words and phrases from sources, but not by copying whole sentences.</li> <li>• Credit sources by citing author and title.</li> <li>• Follow school guidelines related to use of technology.</li> <li>• Demonstrate how to work cooperatively with peers, family members, and others when using technology in the classroom, library, or home.</li> <li>• Distinguish between acceptable and unacceptable computer use.</li> </ul>

<b>Standard 4: Pursue personal and aesthetic growth</b>	
<b>Strand 4.1: Skills</b>	
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Read, view, and listen for personal enjoyment on a regular basis.</li> <li>• Participate in the social interchange of ideas through literary discussions, book clubs, and interest groups.</li> <li>• Read, view, and listen to learn, to solve problems, and to explore many different ideas.</li> <li>• Take advantage of opportunities available within the community for personal growth and learning, including classes, lectures, author presentations, museums, public library programming, and arts performances.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Share reading, viewing, and listening experiences in variety of ways and formats, including book clubs and interest groups.</li> <li>• Seek and locate information about personal interests and usually find it independently, using the same criteria and strategies used for academic information seeking.</li> <li>• Read, listen, and view in a variety of formats (e.g., print and electronic books, other media).</li> <li>• Read, listen, and view to explore new ideas beyond the required curriculum.</li> <li>• Read, listen, and view for pleasure, to learn, to solve problems, and to explore many different ideas.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to find facts about subjects of interest, to form opinions.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Share reading, listening, and viewing experiences in a variety of ways and formats.</li> <li>• Participate in discussions and book clubs.</li> <li>• Independently locate and select information for personal, hobby, or vocational interests.</li> <li>• Recognize library and information sources as having value beyond the need for school assignments.</li> <li>• Read books in a wide variety of genres.</li> <li>• Read, listen, and view independently.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to skim for facts.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Participate in book talks and book discussion groups.</li> <li>• Seek information about personal interests, and ask for help in locating it when necessary.</li> <li>• Set reading goals.</li> <li>• Read, listen to, and view a variety of fiction and nonfiction for enjoyment and information.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to explore personal interests.</li> </ul>

	<ul style="list-style-type: none"> <li>• Visit the public library to attend programs and check out materials to read.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Discuss favorite books and authors through the exposure to author studies and series books.</li> <li>• Distinguish between what is real and what is not real.</li> <li>• Begin to seek information to find out about/learn about an area of personal interest.</li> <li>• Request/choose materials related to personal interests.</li> <li>• Begin to recognize that different genres require different reading, listening, or viewing strategies.</li> <li>• Read, view, and listen to a variety of fiction and nonfiction for enjoyment and information.</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Read, view and use literature (both fiction and nonfiction) to enrich understanding of real-world concepts.</li> <li>• Derive multiple perspectives on the same themes by comparing across different works.</li> <li>• Read widely to develop a global perspective and understand different cultural contexts.</li> <li>• Read to support and challenge own point of view.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Recognize and evaluate the author's point of view and how it affects the text; consider and evaluate alternative perspectives.</li> <li>• Read books that connect to real-world issues.</li> <li>• Recognize similarities and differences among authors writing on the same theme.</li> <li>• Recognize how own point of view influences perspective on text.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Read books that connect to own experiences.</li> <li>• Read with purpose to investigate new ideas beyond the required curriculum.</li> <li>• Read books from various genres.</li> <li>• Compare and contrast story elements in two literary works.</li> <li>• Demonstrate understanding that texts, both narrative and expository, are written by authors expressing their own ideas.</li> <li>• Recognize the author's point of view; consider alternative perspectives.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Use evidence from the text to discuss the author's purpose.</li> <li>• Read widely to explore new ideas.</li> <li>• Make predictions and inferences about events and characters.</li> <li>• Identify problems and solutions in a story.</li> <li>• Draw conclusions about the theme of a story.</li> <li>• Describe how an illustrator's style, elements, and media represent and extend the meaning of the story or the narrative text.</li> <li>• Connect story to previous reading.</li> <li>• Recognize features of various genres and use different reading strategies for understanding.</li> <li>• Demonstrate knowledge of favorite authors, genres, etc.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Demonstrate understanding that authors and illustrators of both narrative and expository texts are real people.</li> <li>• Read widely to find out about self and the surrounding world.</li> <li>• Make predictions about what will happen next in a story.</li> <li>• Draw conclusions about main idea of a story.</li> <li>• Connect an illustration to a story.</li> </ul>

	<ul style="list-style-type: none"> <li>• Compare characters in two different stories, or plots in two stories by the same author.</li> <li>• Retell a story using own words and pictures.</li> </ul>
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**Indicator 4.1.3:** Respond to literature and creative expressions of ideas in various formats and genres.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>• Express new ideas and connect to the human experience through information presented in various formats.</li> <li>• Identify universal themes in literature and different cultural approaches to those themes.</li> <li>• Share reading experiences in variety of ways and formats.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Assess the emotional impact of specific works on the reader or viewer.</li> <li>• Apply ideas gained from responding to literary and artistic works to own life.</li> <li>• Evaluate the effectiveness of a literary work in terms of the author's use and interweaving of literary elements.</li> <li>• Compare the theme and its treatment in different works of literature.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Respond to the images and feelings evoked by a literary or artistic work.</li> <li>• Connect text to personal experiences.</li> <li>• Use illustrations, context, graphics, and layout to extract meaning from different formats.</li> <li>• Interpret literary elements (plot, setting, characters, time) from evidence presented in the text.</li> <li>• Draw conclusions about the theme from evidence in the text.</li> <li>• Recognize how characters change.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Connect own feelings to emotions, characters, and events portrayed in a literary work.</li> <li>• Use personal experiences to stimulate responses to literature and art.</li> <li>• Understand and restate ideas presented through creative formats.</li> <li>• Identify story elements in various fiction genres.</li> <li>• Use evidence from stories to discuss characters, setting, plot, time, and place.</li> <li>• Discuss theme of stories, using evidence to support opinions.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Listen to/read multicultural texts from various genres.</li> <li>• Express feelings about characters and events in a story.</li> <li>• Make connections between literature and own experiences.</li> <li>• Respond to imaginative stories and performances.</li> <li>• Retell stories using the correct sequence of events.</li> <li>• Identify plot, characters, times, and places in a story.</li> </ul>

**Indicator 4.1.4:** Seek information for personal learning in a variety of formats and genres.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>• Explore real-world genres as well as favorite genres and authors (movie reviews, editorials, consumer reports, game tips and strategies, career information).</li> <li>• Set reading goals and maintain a personal reading list.</li> <li>• Find information about personal interests independently, using the same criteria and strategies used for academic information seeking.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Select texts for academic, personal, and real-world purposes.</li> <li>• Select print, non-print, and digital materials based on personal interests and knowledge of authors.</li> <li>• Select texts on topics of interest at both a comfortable reading level and one that</li> </ul>

	<p>requires higher levels of comprehension skills.</p> <ul style="list-style-type: none"> <li>• Read a variety of fiction and nonfiction materials.</li> <li>• Read/listen to works of international and multicultural authors.</li> <li>• Use print, non-print, and electronic information resources for information about personal needs; actively seek answers to questions.</li> <li>• Set reading goals and maintain a personal reading list.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Read a variety of genres, including short stories, novels, poems, plays, drama, myths, films, and electronic magazines and books.</li> <li>• Describe the characteristics of different genres.</li> <li>• Explore new genres that fulfill interests and reading level (graphic novels, magazines, online magazines, e-books).</li> <li>• Select texts for classroom learning and for personal exploration.</li> <li>• Select texts on topics of interest at both a comfortable reading level and one that requires higher levels of comprehension skills.</li> <li>• Select print, non-print, and electronic materials based on personal interests and knowledge of authors.</li> <li>• Maintain a personal reading list.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Select books from favorite authors and genres; try new genres when suggested.</li> <li>• Select texts in various formats based on a theme, topic, connection to classroom learning or personal interest.</li> <li>• Select both “just right” books and challenging books on a regular basis.</li> <li>• Recognize the works of a single author.</li> <li>• Recognize why some authors and genres have become favorites.</li> <li>• Select appropriate print, non-print and electronic materials on an individual level.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Select picture, fiction, and information books on a regular basis; try some books in other genres (poetry, fairy tales).</li> <li>• Select texts in various formats based on suggestions from teacher or librarian and personal interest.</li> <li>• Select some books at the appropriate reading level, other books to be read aloud, and other more challenging books of particular interest for browsing and enjoyment.</li> <li>• Begin to explore and examine the various genres and formats based on personal interests.</li> <li>• Explain personal criteria for selecting a book, poem, or story.</li> <li>• Select books, poems, tapes or other formats based on teacher-selected criteria, or because the stories or authors are favorites.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Connect new ideas/understandings to future uses – college, career, personal life.</li> <li>• Reflect on changes in personal goals, reading preferences, personal interests, and knowledge base over the previous four years.</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Understand text on both a literal and an abstract level.</li> <li>• Use context and graphic clues to aid understanding.</li> <li>• Consider alternative perspectives and evaluate differing points of view.</li> <li>• Compare new ideas to previous understandings and make changes to mental framework where appropriate.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Understand literal and implied meanings, and place new meanings in a conceptual framework.</li> <li>• Seek ideas in various types of resources to help interpret the world of home, school, and peers.</li> </ul>



	<ul style="list-style-type: none"> <li>Track new and up-to-date ideas by reading online information, magazines, and other current sources. Check the ideas for accuracy by paying attention to the authority of the source and validating the ideas through multiple resources.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Use prior knowledge to understand and compare literature.</li> <li>Understand literal meaning and identify the main points.</li> <li>Compare the ideas in various types of resources to experiences in real life.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>When starting to read a book, tap into previous knowledge about the author or subject by discussing with friend, teacher, or parent.</li> <li>Demonstrate comprehension of stories read independently and stories read by the librarian.</li> <li>Develop criteria for deciding if a book matches interests and reading level.</li> <li>Find fiction and nonfiction books that are interesting (subject, text, pictures, graphics). Read them independently or ask for them to be read aloud by librarian or parent.</li> </ul>

**Indicator 4.1.6:** Organize personal knowledge in a way that can be called upon easily.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>Connect new information to ideas previously learned by developing graphic organizers and taxonomies to link large concepts to related details.</li> <li>Remember the main ideas by seeing the pattern they present (e.g., cause and effect, growth or change over time).</li> <li>Standardize personal system of note-taking so that it incorporates the main ideas and personal responses (emotional reactions, questions).</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>Use visualization to provide a clear picture of the ideas to be remembered.</li> <li>Categorize new ideas with key words and tagging.</li> <li>Develop own system of note-taking that incorporates personal reflections.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>Develop a visual picture of the main ideas and design a concept map, web, or graphic to capture the ideas.</li> <li>Identify own learning style and organize ideas accordingly (e.g., linear, graphic).</li> <li>Use two-column approach to note-taking to capture personal connections to information.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>Use simple graphic organizers and scaffolding available through technology software to capture the main ideas and their relationships to each other.</li> <li>Use two-column approach to note-taking to capture personal connections to information.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>Take notes using graphic organizer provided by teacher or librarian.</li> <li>Draw pictures of main ideas.</li> </ul>

**Indicator 4.1.7:** Use social networks and information tools to gather and share information.

Grade-Level Benchmarks	
Grade 12	<ul style="list-style-type: none"> <li>Address real-world problems and issues by using information and communication technology tools to gather, evaluate, and use information from different sources, analyze findings, draw conclusions, and create solutions.</li> <li>Use telecommunication to search for and identify potential work, college, or other opportunities.</li> <li>Participate in the social interchange of ideas through book discussions, interest groups, and online sharing.</li> <li>Apply production strategies and technology tools to design products to meet personal needs.</li> </ul>



	<ul style="list-style-type: none"> <li>• Participate in social networks responsibly and safely.</li> <li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Use information and communication technology tools and resources to collect, organize, and evaluate information relevant to a real-world issue or problem.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> <li>• Search other libraries for information related to personal interests.</li> <li>• Apply technology productivity tools to meet personal needs.</li> <li>• Participate in social networks responsibly and safely.</li> <li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Use information and communication technology tools and resources to collect, organize, and evaluate information relevant to issues or interests.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> <li>• Apply technology productivity tools to meet personal needs.</li> <li>• Participate in social networks responsibly and safely.</li> <li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>
Grade 5	<ul style="list-style-type: none"> <li>• Identify ways that technology has been used to address real-world problems.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Identify ways that technology can help solve problems.</li> <li>• Identify personal interest and seek help in using technology to find information about it.</li> <li>• Utilize print, non-print, and electronic sources with guidance from the librarian to find information.</li> <li>• Begin to experiment with online catalog and Internet resources to locate information.</li> </ul>
<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>	
<b>Grade-Level Benchmarks</b>	
Grade 12	<ul style="list-style-type: none"> <li>• Create original products using multiple formats.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
Grade 10	<ul style="list-style-type: none"> <li>• Express own ideas through creative products in a variety of formats.</li> <li>• Choose format appropriate for audience and purpose.</li> <li>• Select and use various types of multimedia software for artistic and personal expression.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
Grade 8	<ul style="list-style-type: none"> <li>• Create original products based on responses to literature.</li> <li>• Experiment with various types of multimedia software for artistic and personal expression.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers museums).</li> </ul>

Grade 5	<ul style="list-style-type: none"> <li>• Present creative products in a variety of formats.</li> <li>• Express the mood and main ideas of a story through creative formats.</li> <li>• Use software packages for artistic and personal expression.</li> <li>• Use multimedia authoring tools for independent and collaborative publishing activities.</li> </ul>
Grade 2	<ul style="list-style-type: none"> <li>• Express feelings about a story through pictures and words.</li> <li>• Use technology tools to create and present ideas.</li> <li>• Express own ideas through creative products in a variety of formats.</li> </ul>

### 3. Dispositions in Action

#### Defining Dispositions in 21<sup>st</sup> Century Learning

One of the core functions of 21<sup>st</sup> century education is learning to learn in preparation for a lifetime of change (Claxton, 2007). Acquiring knowledge alone does not guarantee that this learning will be used and applied. Learning in the 21<sup>st</sup> century also requires a capacity to learn that reflects a range of dispositions: to be curious, resilient, flexible, imaginative, critical, reflective, and self-evaluative (Costa and Kallick, 2000; Perkins, 1992).

Dispositions have been variously described as habits of mind, attitudes, and learning behaviors. Regardless of the term used, a disposition is a tendency to exhibit frequently, consciously, and voluntarily a pattern of behavior that is directed to a broad goal (Katz, 2000). Dispositions are not defined simply by the acquisition of skills. One can be proficient in a particular skill without intentionally and mindfully using it. In other words, *having* is not the same as *doing*: for example, students may know how to evaluate Web sites, but if they do not believe that evaluation is critical, they revert to mindlessly selecting the first Web site in their Google searches. Importantly, Dispositions are not inborn. They can be supported and strengthened with curriculum and teaching strategies. Instructors foster desirable dispositions by challenging students to consider not only *what* they are learning but also *how* they are learning and *why* they value the learning.

#### Dispositions and the Learning Process

Dispositions can be displayed at any point in the learning process. They are neither standard-specific, nor grade-level-specific. For example, *persistence* can be demonstrated at all grade levels by pursuing information to gain a broad perspective (Standard 1), posing a conclusion and testing it against the evidence (Standard 2), contributing responsibly in learning situations (Standard 3), and seeking information that answers personal questions and interests (Standard 4).

#### Teaching for Dispositions

Dispositions are developed over time by the way that educators structure learning experiences. For example, if library media specialists and classroom teachers give students quick assignments where they are expected to grasp whatever information they can find quickly, then they will not have opportunities to demonstrate persistence. If library media specialists and classroom teachers do not value multiple perspectives in the way they structure and grade assignments, then students will not persist in finding a broad perspective.

The following table lists sample student behaviors that express the indicated disposition and the stages through which the disposition might develop. The stages demonstrate the shift from teacher-in-control to student-in-control that is necessary for students to develop ownership over the dispositions necessary for successful learning at any age. This is not an exhaustive list, but it suggests the breadth of possibilities for teaching and assessing dispositions while students are learning.

#### Standard 1: Inquire, think critically, and gain knowledge.

**Indicator 1.2.1: Display initiative and engagement by posing questions and investigating the answers beyond the collection of superficial facts**

**Sample behaviors**

- Develop questions that relate to the essential or overarching question in the inquiry.
- Develop questions that explore the larger topic or issue to gain essential background knowledge.
- Develop questions that focus on “how do we know what we know.”
- Develop questions that require making connections between ideas and events.
- Develop questions that challenge previous thinking.

#### **Stages of development**

**Stage 1** – Pose questions but largely at the factual level.

**Stage 2** – Pose questions at both the factual and higher levels of thinking with considerable guidance from the teacher or librarian.

**Stage 3** – Pose questions at both the factual and higher levels of thinking with minimal assistance from the teacher or librarian.

#### ***Indicator 1.2.2: Demonstrate confidence and self-direction by making independent choices in the selection of resources and information.***

##### **Sample behaviors**

- Preview resources to decide which best meet information needs.
- Apply evaluation strategies and criteria to select resources.
- Revise search based on information found.

##### **Stages of development**

**Stage 1** – Seek continual assistance from teacher, librarian, and peers in selecting resources and information.

**Stage 2** – Use strategies and criteria provided by the teacher or librarian to select appropriate resources.

**Stage 3** – Work independently in evaluating resources and information and revising search strategies as needed.

#### ***Indicator 1.2.3: Demonstrate creativity by using multiple resources and formats.***

##### **Sample behaviors**

- Collect needed information from resources in a range of formats.
- Experiment with new ways to communicate information.

##### **Stages of development**

**Stage 1** – Use the same types of resources and formats for all information needs.

**Stage 2** – Use an expanding range of resources and formats that have been suggested by the teacher or librarian.

**Stage 3** – Use a range of resources and formats and try different ways to appropriately present information.

#### ***Indicator 1.2.4: Maintain a critical stance by questioning the validity and accuracy of all information.***

##### **Sample behaviors**

- Distinguish fact from opinion.
- Detect bias.
- Use additional sources to verify conflicting information.

##### **Stages of development**

**Stage 1** – Tend to accept all information at face value.

**Stage 2** – Examine the soundness and relevance of information with considerable teacher or librarian guidance and prompting.

**Stage 3** – Critically examine the soundness and relevance of information as an integral aspect of any learning process with little prompting from teacher or librarian.

***Indicator 1.2.5: Demonstrate adaptability by changing the inquiry focus, questions, resources, or strategies when necessary to achieve success.***

**Sample behaviors**

- Modify the inquiry focus based on data collected.
- Revise questions based on new information.
- Modify search strategies to deal with emerging findings.

**Stages of development**

**Stage 1** – Tend to stick with original focus and questions even when information gathered indicates a need for adjustments.

**Stage 2** – Make changes to the original focus and questions based on data collected, but need considerable help in identifying new resources and adapting strategies to move ahead.

**Stage 3** – Require limited assistance to modify research focus, questions, and search strategies; independently select additional resources as needed.

***Indicator 1.2.6: Display emotional resilience by persisting in information searching despite challenges.***

**Sample behaviors**

- Brainstorm new ways of searching for information when the existing strategy does not work.
- Analyze challenges faced in the research process and identify the possible barriers.

**Stages of development**

**Stage 1** – Need continual encouragement when first attempts to find information are not successful.

**Stage 2** – Identify alternative strategies to find needed information with occasional help and emotional support from the teacher or librarian.

**Stage 3** – Reflect on why original search strategies did not work; determine additional possibilities independently.

***Indicator 1.2.7: Display persistence by continuing to pursue information to gain a broad perspective.***

**Sample behaviors**

- Use a range of resources to search for a broader or deeper perspective on an inquiry.
- Display continuing curiosity that fuels self-generated investigation of an inquiry.

**Stages of development**

**Stage 1** – Limit information pursuit to the requirements of the assignment.

**Stage 2** – Generate additional questions and use additional resources that demonstrate more depth than required in the original assignment.

**Stage 3** – Show evidence of pursuing questions even after the original assignment has been completed.

## **Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

***Indicator 2.2.1: Demonstrate flexibility in the use of resources by adapting information strategies to each specific resource and by seeking additional resources when clear conclusions cannot be drawn.***

### **Sample behaviors**

- Realize that Web searching and book searching require different skills and adapt accordingly.
- Detect conflicting information and access resources that contribute to thoughtful conclusions.

### **Stages of development**

**Stage 1** – Use the same strategies for searching regardless of the format or medium and the appropriateness/comprehensiveness of the information for drawing a conclusion.

**Stage 2** – Adjust search strategies depending on the format or medium being used, but tend not to resolve conflicting or unclear findings.

**Stage 3** – Detect conflicting information and retrieve data to resolve or clarify findings; independently adapt search techniques to locate necessary information in different formats.

***Indicator 2.2.2: Use both divergent and convergent thinking to formulate alternative conclusions and test them against the evidence.***

### **Sample behaviors**

- Explore a wide range of possible conclusions and analyze the evidence to support them.
- Bring together information to solve a problem or reach a conclusion.

### **Stages of development**

**Stage 1** – Identify one possible conclusion but require considerable guidance from the teacher or librarian to come up with other possibilities.

**Stage 2** – Identify more than one possible conclusion but require considerable guidance from the teacher or librarian in figuring ways to determine which conclusions can actually be supported.

**Stage 3** – Identify a range of possible conclusions and determine techniques to test them against the evidence with limited help from the teacher or librarian.

***Indicator 2.2.3: Employ a critical stance in drawing conclusions by demonstrating that the pattern of evidence leads to a decision or conclusion.***

### **Sample behaviors**

- Recognize fallacies in logic.
- Identify misleading information and gaps in information that lead to inaccurate conclusions.
- Read widely from varied sources to pinpoint inaccurate information.

### **Stages of development**

**Stage 1** – Draw questionable conclusions based on shallow or incomplete evidence.

**Stage 2** – Draw plausible conclusions but need help from the teacher or librarian to articulate how the evidence supports those conclusions.

**Stage 3** – Draw conclusions or make decisions based on clearly documented evidence drawn from a range of appropriate resources.

***Indicator 2.2.4: Demonstrate personal productivity by completing products to express learning.***

**Sample behaviors**

- Establish a research plan that outlines learning goals, identifies major tasks and deadlines to achieve steps toward the goals, and documents progress throughout the research process.
- Set and meet high standards and goals for delivering quality work on time.

**Stages of development**

**Stage 1** – Develop a simple plan (goals, tasks, deadlines) for conducting research with considerable help from the teacher or librarian.

**Stage 2** – Develop a detailed plan (goals, tasks, criteria to assess work, deadlines) but need periodic reminders from the teacher or librarian to complete the work in a timely manner.

**Stage 3** – Develop a detailed plan and monitor own progress in completing high quality work in a timely manner.

### **Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

***Indicator 3.2.1: Demonstrate leadership and confidence by presenting ideas to others in both formal and informal situations.***

**Sample behaviors**

- Present findings of an inquiry project in an organized, articulate, and poised delivery.
- Freely communicate ideas and opinions that are thoughtfully supported in small group and large group settings.

**Stages of development**

**Stage 1** – Share ideas and opinions comfortably in informal settings.

**Stage 2** – Share ideas and opinions comfortably in both informal and formal settings.

**Stage 3** – Frequently facilitate exchange of ideas and opinions in informal settings; share ideas with poise and confidence in formal situations.

***Indicator 3.2.2: Show social responsibility by participating actively with others in learning situations and by contributing questions and ideas during group discussions.***

**Sample behaviors**

- Listen respectfully and objectively; offer constructive feedback.
- Contribute opinions, ideas, and questions in a responsible manner.

**Stages of development**

**Stage 1** – Listen respectfully but rarely contribute to the group discussions.

**Stage 2** – Listen respectfully and when appropriate, offer information and opinions in group discussions.

**Stage 3** – Listen respectfully, contribute and ask clarifying questions, and often take the lead in encouraging others to share their ideas and opinions.

***Indicator 3.2.3: Demonstrate teamwork by working productively with others.***

**Sample behaviors**

- Take on different roles and tasks willingly within the group to accomplish shared ends.
- Help to leverage strengths of others to accomplish a common goal.
- Use problem-solving skills to influence and guide others toward a goal.

**Stages of development**

**Stage 1** – Seldom volunteer but will complete tasks assigned by the team.

**Stage 2** – Assume different roles in a team to complete tasks and achieve goals.

**Stage 3** – Frequently assume leadership in the team; seek consensus to achieve goals.



## Standard 4: Pursue personal and aesthetic growth.

### ***Indicator 4.2.1: Display curiosity by pursuing interests through multiple resources.***

#### **Sample behaviors**

- Explore print, digital and other resources to find information on a topic of personal interest.
- Seek diverse opinions and points of view in critically investigating a topic of personal interest.

#### **Stages of development**

**Stage 1** – Satisfy personal information needs using the same limited resources.

**Stage 2** – Satisfy personal information needs using new (to the student) as well as familiar resources in a range of formats.

**Stage 3** – Satisfy personal information needs using a range of information sources; demonstrate evidence of seeking different views and opinions on these topics.

### ***Indicator 4.2.2: Demonstrate motivation by seeking information to answer personal questions and interests, trying a variety of formats and genres, and displaying a willingness to go beyond academic requirements.***

#### **Sample behaviors**

- Voluntarily generate questions that go beyond an assignment.
- Independently pursue answers to self-generated questions.

#### **Stages of development**

**Stage 1** – Show limited interest in reading, viewing, or listening to meet personal needs.

**Stage 2** – Explore a range of resources to answer personal questions and pursue personal interests.

**Stage 3** – Explore various information formats and literary genres to meet personal needs and voluntarily pursue questions generated by class assignments.

### ***Indicator 4.2.3: Maintain openness to new ideas by considering divergent opinions, changing opinions or conclusions when evidence supports the change, and seeking information about new ideas encountered through academic or personal experiences.***

#### **Sample behaviors**

- Willingly accept diverse points of views and ideas and carefully analyze them.
- Modify personal view or conclusion based on the analysis of new information and evidence.

#### **Stages of development**

**Stage 1** – Acknowledge opinions of other people on a particular topic or issue.

**Stage 2** – Consider both documented evidence as well as other people's views on a particular topic or issue in developing a personal opinion.

**Stage 3** – Develop a personal view on a topic or issue by taking into account documented evidence and views expressed by others and by pursuing additional and divergent information.

### ***Indicator 4.2.4: Show an appreciation for literature by electing to read for pleasure and expressing an interest in various literary genres.***

#### **Sample behaviors**

- Read as a voluntary, out-of-class pursuit.
- Select and enjoy a range of print and digital resources based on personal interests.
- Maintain a personal reading list.

**Stages of development**

**Stage 1** – Read when required; tend to stick with a preferred genre.

**Stage 2** – Read voluntarily for pleasure; independently explore various genres.

**Stage 3** – Read voluntarily for pleasure in a range of genres; maintain a personal reading log.

## 4. Responsibilities

### Defining Responsibilities in 21<sup>st</sup> Century Learning

Learning in the 21<sup>st</sup> century requires active participation by the learner. A learned person is not one who has simply memorized theorems or passively accepted conclusions drawn by others. A learned person must take **responsibility** for actively pursuing information and ideas both in print and digitally, understanding those ideas and how they apply, drawing conclusions and developing new applications, and sharing their new understandings with others. Responsibilities, then, can be defined as the common behaviors that must be exhibited during researching, investigating, and problem solving to develop new understanding successfully, ethically, and thoughtfully. Responsibilities are key to successful learning in the 21<sup>st</sup> century.

The 21<sup>st</sup> century context has led to an interesting blend between independent and social learning and, therefore, between individual and social responsibilities. The digital environment makes greater amounts of information available at the learner's fingertips and at the time of need. As a result, learners experience pressure to be independent in their information searching because they often are using information tools when personal support from their teacher or librarian is not available. At the same time, the tools of learning and the increasingly globalized context of society provide opportunities and obligations to collaborate, seek divergent perspectives, work effectively in groups and share learning products and processes.

Learners, therefore, have responsibilities during the learning process to themselves and to others. For themselves, learners must follow ethical and legal guidelines, respect the principles of intellectual freedom, pursue multiple perspectives and a balance of viewpoints before making decisions or drawing conclusions, practice safe behaviors in the use of social tools, seek opportunities for pursuing personal and aesthetic growth, and connect their learning to real-world issues and ideas. For others, learners have a responsibility to contribute to the exchange of ideas in a learning community, both electronically and in person, respect the ideas and experiences of others, and use information and knowledge in service of democratic values.

### Responsibilities and the Learning Process

Responsibilities, like dispositions, can be displayed at any point in the learning process and are neither standard-specific, nor grade-level specific. The same responsibilities may be necessary whether the learner is investigating, drawing conclusions, sharing knowledge, or reading for enjoyment. For example, learners have a responsibility to their community of learners to contribute to the exchange of ideas. They might share book reviews on a wiki or participate in a book discussion group (Standard 4) or they might bring their individually researched evidence and conclusions to a group discussion to help a group reach a valid and ethical decision (Standard 2).

### Teaching for Responsibilities

Responsibilities are developed when learning experiences are structured for active engagement and sharing. This requires a shift from pure didactic instruction (with the librarian in control) to a more constructivist approach that combines direct instruction with opportunities for guided and independent practice (with empowered learners in control of their own learning). Responsibilities must be developed over time, with strong support initially and gradual reduction of guidance until students have assumed the responsibilities for themselves.

The following pages offer sample behaviors that indicate student performance of responsibility and the stages through which the responsibility might develop. The stages demonstrate the shift from teacher-in-

control to student-in-control that is necessary for students to develop ownership over the responsibilities necessary for successful learning at any age.

## **Standard 1: Inquire, think critically, and gain knowledge.**

### ***Indicator 1.3.1: Respect copyright/intellectual property rights of creators and producers.***

#### **Sample behaviors**

- Cite the source for all information that is not commonly known or in numerous sources.
- Use quotation marks for all material taken directly from a source.
- Put information into own words rather than simply changing a word or two.

#### **Stages of development**

**Stage 1** - Acknowledge work of others by citing source(s).

**Stage 2** - Provide reference citations for all direct quotations as well as cite sources.

**Stage 3** - Put information into own words and provide credit, citations and bibliography for all quoted and referenced information.

### ***Indicator 1.3.2: Seek divergent perspectives during information gathering and assessment.***

#### **Sample behaviors**

- Recognize when different perspectives exist about an issue.
- Seek credible sources that present different viewpoints.
- Evaluate every source to determine whether point of view has skewed the accuracy of the information presented.

#### **Stages of development**

**Stage 1** - Find information to support one point of view, but acknowledge that another point of view exists.

**Stage 2** - Find information to represent two points of view about a research topic.

**Stage 3** - Find information that credibly represents all relevant perspectives on a research topic.

### ***Indicator 1.3.3: Follow ethical and legal guidelines in gathering and using information.***

#### **Sample behaviors**

- Follow copyright guidelines for text, visuals, and music in generating products and presentations.
- Present information accurately.
- Differentiate clearly between information gathered from sources and original thinking and conclusions.

#### **Stages of development**

**Stage 1** - Follow legal guidelines in using information using only excerpts and crediting the author/creator.

**Stage 2** - Follow copyright guidelines by using only excerpts and crediting the source of all text, visuals, and music and follow ethical guidelines by presenting only accurate and valid information.

**Stage 3** - Gather and present information ethically by communicating an accurate, full, and unbiased picture of the topic and clearly distinguishing between cited and original thinking.

### ***Indicator 1.3.4: Contribute to the exchange of ideas within the learning community.***

#### **Sample behaviors**

- Share relevant information to contribute to learning of others (through discussions, presentations).
- Contribute opinions and supporting evidence to group deliberations.
- Listen to opinions and evidence of others.
- Ask and respond to questions in group exchange of ideas.

#### **Stages of development**

**Stage 1** - Offer opinions and information to group discussions on occasion.

**Stage 2** - Offer opinions with supporting evidence to group discussions whenever appropriate.

**Stage 3** - Listen to opinions and evidence of others and respond to them in offering own opinion and evidence to group discussion.

#### ***Indicator 1.3.5: Use information technology responsibly.***

#### **Sample behaviors**

- Purchase, rather than pirate, music and videos from the Internet.
- Access only appropriate Internet sites.
- Use digital social tools responsibly by protecting own personal information and posting only accurate and non-inflammatory information.

#### **Stages of development**

**Stage 1** - Use only digital tools and Internet sites that have been pre-approved by teacher or librarian.

**Stage 2** - Select digital tools and Internet sites from choices presented by teacher or librarian and use appropriately.

**Stage 3** - Use appropriate digital tools and Internet sites independently in a safe and ethical manner (e.g., appropriate to age/grade level, related to topic under consideration, authoritative information).

## **Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

### ***Indicator 2.3.1: Connect understanding to the real world.***

#### **Sample behaviors**

- Apply or adapt conclusions or decisions to new situations.
- Draw on understandings to make personal decisions.
- Make connections between information gathered through research and real life.

#### **Stages of development**

**Stage 1** - State what new understanding means in own language.

**Stage 2** - Apply what has been learned to new situation.

**Stage 3** - Use what has been learned to make a decision or deal with a situation in own personal life.

### ***Indicator 2.3.2: Consider diverse and global perspectives in drawing conclusions.***

#### **Sample behaviors**

- Actively seek valid alternative perspectives when seeking information.
- Evaluate the authors and viewpoints of all information sources, using questions like:
  - Does this person or group have the knowledge and authority to represent this perspective?
  - Does the point of view influence the accuracy and reliability of the information?
- Seek sources written by authors in other parts of the world when appropriate, rather than solely sources written by American authors about other parts of the world.

#### **Stages of development**

**Stage 1** - Consider the point of view of the first source found in drawing a conclusion.

**Stage 2** - Seek alternative perspectives before attempting to make a decision or draw a conclusion.

**Stage 3** - Validate the authority and authenticity of diverse viewpoints before using the evidence to draw a conclusion.

### ***Indicator 2.3.3: Use valid information and reasoned conclusions to make ethical decisions.***

#### **Sample behaviors**

- Use criteria to evaluate information before making decisions.
- Consider all the evidence and the strength of support for conflicting views before reaching a decision, rather than making a decision and then looking for evidence to support it.

#### **Stages of development**

**Stage 1** - Use information to make a decision.

**Stage 2** - Evaluate information before using it to make a decision.

**Stage 3** - Consider all relevant and accurate information in order to make a decision.

### **Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

***Indicator 3.3.1: Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community.***

**Sample behaviors**

- Solicit and listen respectfully to ideas and opinions of others.
- Build on the ideas of others in group conversations and discussions.
- State own opinions respectfully, with evidence to back them up.
- Actively seek common ground in discussions where different viewpoints are expressed.
- Create a safe zone where different viewpoints can be expressed without fear of disrespect or outright dismissal.

**Stages of development**

**Stage 1** - State own opinions respectfully with evidence to back them up.

**Stage 2** - Listen to the opinions of others and modify own opinions when appropriate.

**Stage 3** - Actively seek the opinions of others and create a group environment in which all participants' ideas are shared and valued.

***Indicator 3.3.2: Respect the differing interests and experiences of others, and seek a variety of viewpoints.***

**Sample behaviors**

- Recognize the benefits of differing viewpoints for expanding understanding.
- Ask leading questions that draw out the interests and experiences of others.

**Stages of development**

**Stage 1** - Recognize when people in a group have different opinions.

**Stage 2** - Track the changes of opinion that result from exposure to different ideas of others in the group.

**Stage 3** - Draw out and respond to the different interests and perspectives of members of a group.

***Indicator 3.3.3: Use knowledge and information skills and dispositions to engage in public conversation and debate around issues of common concern.***

**Sample behaviors**

- Engage with others in discussions and debates around important issues.
- Seek valid and accurate information on current issues to be able to contribute to group discussions.

**Stages of development**

**Stage 1** - Engage in conversations and debate by offering relevant information some of the time.

**Stage 2** - Engage in conversations and debate by offering relevant information often.

**Stage 3** - Engage in conversations and debate by offering relevant information most of the time.

***Indicator 3.3.4: Create products that apply to authentic, real-world contexts.***

**Sample behaviors**

- Produce ideas and projects that can be applied in real situations.
- Produce projects that connect with relevant issues in the local, national, and global

communities.

**Stages of development**

**Stage 1** - Create products with real-world contexts that have been specified by the teacher or librarian.

**Stage 2** - Create products that show the application of knowledge to a real-world situation or issue.

**Stage 3** - Create products that have the quality and applicability to be used in the real world.

***Indicator 3.3.5: Contribute to the exchange of ideas within and beyond the learning community.***

**Sample behaviors**

- Participate actively as a member of the learning community by contributing appropriate information, asking thoughtful questions, challenging questionable statements, and listening carefully to others.
- Move group idea exchanges to logical and inclusive conclusions by summarizing main points, finding consensus among ideas presented by different group members, and making sure that everyone in the group has had the opportunity to contribute.
- Present ideas publicly beyond the school learning community when opportunities become available.

**Stages of development**

**Stage 1** - Offer appropriate information to help group deliberate and reach a decision together.

**Stage 2** - Question own and others' ideas to ensure that shared ideas are investigated thoroughly from all sides.

**Stage 3** - Challenge the thinking of the group to move it to better decision-making.

***Indicator 3.3.6: Use information and knowledge in the service of democratic values.***

**Sample behaviors**

- Make sure that all voices are heard within the learning community by encouraging participation, eliciting responses to questions, and inviting the expression of divergent opinions.
- Make sure that underrepresented viewpoints are heard and not stifled by the will of the majority.
- Bring a group to a consensus of opinion.
- Seek justice and equity where research has shown they do not exist.

**Stages of development**

**Stage 1** - Encourage participation in sharing of information and decision-making by all members of school community.

**Stage 2** - Bring a group to consensus of opinion after all voices are heard.

**Stage 3** - Apply group decision-making to situations of larger democratic values, like equity, freedom and responsibility.

***Indicator 3.3.7: Respect the principles of intellectual freedom.***

**Sample behaviors**

- Exercise the right to express ideas freely and responsibly.
- Resist censorship of ideas and resources.
- Pursue the right to read, view, and listen.
- Ensure that one person's rights do not infringe on another's.



**Stages of development**

**Stage 1** - Exercise the right to express ideas freely and responsibly.

**Stage 2** - Actively preserve the rights of others to express ideas freely.

**Stage 3** - Ensure that one person's rights to speak or write freely do not infringe on the rights of others.

## Standard 4: Pursue personal and aesthetic growth.

**Indicator 4.3.1: Participate in the social exchange of ideas, both electronically and in person.**

**Sample behaviors**

- Use social tools to communicate with and respond to others.
- Act responsibly and respectfully in communicating with others.

**Stages of development**

**Stage 1** - Use social tools occasionally to share information and communicate with others.

**Stage 2** - Use social tools often to share information and communicate with others.

**Stage 3** - Use social tools to share information and communicate with others as a regular part of daily academic and personal life.

**Indicator 4.3.2: Recognize that resources are created for a variety of purposes.**

**Sample behaviors**

- Identify reasons that different genres are created and choose appropriate genres for specific situations or interests.
- Recognize that the purpose of a resource influences its presentation and message.

**Stages of development**

**Stage 1** - Read or view 1-2 different genres on a regular basis for personal enjoyment.

**Stage 2** - Read or view several different genres on a regular basis for personal enjoyment.

**Stage 3** - Read or view different genres on a regular basis that are selected because they match the personal reason for reading or viewing with the creator's purpose.

**Indicator 4.3.3: Seek opportunities for pursuing personal and aesthetic growth.**

**Sample behaviors**

- Choose to read books for enjoyment.
- Find information to satisfy personal interests and questions.
- Express ideas and emotions through a variety of venues (artistic, written, oral).

**Stages of development**

**Stage 1** - Read for enjoyment and personal growth occasionally.

**Stage 2** - Read for enjoyment and personal growth regularly.

**Stage 3** - Read for enjoyment and personal growth on a daily basis.

**Indicator 4.3.4: Practice safe and ethical behaviors in personal electronic communication and interaction.**

**Sample behaviors**

- Restrict Internet posting of personal information to remain within safety guidelines (no personally identifiable information).
- Maintain ethical standards in personal contributions to the Internet (no bullying, slander, inflammatory language, or biased or inaccurate information).
- Refrain from downloading proprietary music, videos, or information without permission or purchase.

**Stages of development**

**Stage 1** - Maintain safe behavior when accessing Internet sites for personal reasons.

**Stage 2** - Maintain safe behavior when accessing Internet sites and refrain from downloading

copyrighted material if it has not been purchased.

**Stage 3** - Maintain safe and ethical behavior when accessing Internet sites by protecting personal safety, displaying ethical and respectful behavior toward others, and following legal guidelines in downloading and use of material.

## 5. Self-Assessment Strategies

### Defining Self-Assessment in 21<sup>st</sup> Century Learning

Learners in the 21<sup>st</sup> century must take charge of their own learning in order to be able to sort through and make sense of the overwhelming amount of available information and use the information to fulfill personal and academic needs. Both the “what” and the “how” of learning have become so complex in today’s global society that learners must make constant decisions throughout their own learning process (e.g., Do I have enough information to make a good decision?; Am I getting good, unbiased information or is someone just trying to sell a point of view?; Do I need to get the most current information online and how do I make sure that information is accurate?). These decisions are based on self-assessment, the cornerstone of independence in learning.

Self-assessment means developing internal standards and comparing performance, behaviors, or thoughts to those standards. A teacher or librarian can assess the explicit products of students’ learning processes (e.g., how many ideas did a student contribute to a group discussion; how effective was a student’s final presentation), but only the students can assess their own thinking, attitudes and motivations. Self-assessment, then, involves a reflective process of self-monitoring according to internal standards (How am I doing?) and metacognition (How am I thinking?).

### Self-Assessment and the Learning Process

At different points in the learning process, learners may assess, or reflect on, their own processes of learning (skills, dispositions, responsibilities), their learning products (content, presentation), or their own thinking. Reflection must become intrinsic to learning so that learning is not defined as an accumulation of information, but rather as the thoughtful processing of information to produce, apply, and create knowledge. Self-assessment strategies are neither standard-specific, nor grade-level specific.

Self-assessment is three-directional: 1) Looking backwards at work that has been done to see how successful it was (summative assessment); 2) Looking at the present to determine the next steps (formative assessment); and 3) Looking at the future to decide what has been learned that will make the learning process more effective in the future (predictive assessment).

Self-assessment is enhanced by applying it in a social context, because learning itself is social. Learners can assess their own performance and progress more effectively by gathering feedback from others, looking at how their individual skills contribute to group learning, thinking about the responsibilities and dispositions that are most appropriate for the learning situation and others around them, and maintaining an eye on the applications of their learning to the real world.

Self-assessment with the opportunity to revise yields increased competence and confidence; that combination of competence and confidence leads to huge increases in achievement. The ultimate result of self-assessment is that students develop their own voice and become empowered to be independent and socially responsive learners.

### Teaching for Self-assessment

Students learn self-assessment through a combination of teaching strategies. **Direct instruction** is appropriate at any time, especially when students are learning a new self-assessment strategy, like reflective notetaking. Librarians might teach, for example, students to ask themselves questions during notetaking as they interact with text (Is this true?; How does this fit with what I already know?; Is there another viewpoint on this issue?; What other questions do I have?). Rather than teaching specific strategies, librarians and teachers may choose to provide **models of exemplary performance** to enable

students to internalize a solid understanding of the expectations and compare their performance with the model. Finally, librarians and teachers may guide students' self-assessment by providing **scaffolding**.

When students are assessing their own learning, they may use strategies that involve reflection, feedback from others, or self-questioning. The following are examples of scaffolding that might be provided by the teacher or librarian for each of these types of strategies. The examples are presented generically so that they can be adapted for any grade level or content area.

### **Reflection**

*Reflection logs* – Students write in a journal or log on a regular basis about their research experience. They may indicate simply what they tried and what they accomplished each day, what frustrations or barriers they are experiencing, what they plan to do next, what questions they have about the subject or process, or what they want to remember later when creating their final product. Librarians and teachers may scaffold attention to specific items or provoke continued progress by offering a prompt for the reflection-log writing (e.g., What was the most important idea you learned today? Why?; What new question has emerged from your research and how do you think you will find the answer?; What's the best online source you've found? Why?). Although the librarian or teacher will want to review and respond to the logs occasionally, their main value lies in the students thinking about their own work.

*Process folios* – Process folios are strategic collections of the process work of learning, just as portfolios are strategic collections of the products of learning. Students begin with a reflection on their whole research process, looking at the barriers and successes along the way. Students then document and reflect on the phases of their learning experience, which might include their initial topic selection, development of questions, search strategy, evaluation of sources, evaluation of information, reflective notetaking, and organization of final product.

*Reflective notetaking* – Many teachers and librarians teach students to do two- or three-column notetaking. This structure leads students to think about the notes while they are taking them because the right column is usually for student reactions to the ideas in the notes. Librarians and teachers may provide prompts for the reflections column or they may leave it up to students to react however they feel is appropriate. The result of using reflective notetaking is that students have already made sense of the information before they try to draw conclusions and organize and create their final product.

### **Using Feedback from Others**

*Rubric or checklist* – Students may provide valuable feedback to their peers by using a rubric or checklist to look at the work and providing comments for suggested revisions. Peer feedback is most useful in the skills area. Embedded within the latter part of this document are Levels of Proficiency for many of the 21<sup>st</sup> century learning skills in these standards. These may easily be extracted and combined to provide a rubric for the skills being addressed during a particular learning experience.

Checklists offer a quicker way for peers to offer feedback. The items on the checklist should correspond with the skills being emphasized during that learning experience. The following chart is a brief example of a checklist for Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.

<b>Criteria in Evidence</b>	<b>Yes</b>	<b>Partly</b>	<b>No</b>
Outline or graphic organizer of ideas is reflected in the organization of the final product			
Conclusion is clearly stated or presented			
Evidence is offered that supports conclusion			
The format of the presentation is appropriate for the audience			
All sources have been documented correctly			
The final product shows clear understanding of the topic			
The final product shows creativity			

*Peer questioning or consultation* – Students can help each other think through their learning process by asking questions and engaging in conversations at strategic points. These peer-to-peer consultancies may be helpful at several phases during the process. Teachers and librarians may provide a set of questions for students to ask each other to help them structure the conversation. For example, at the early stages of research, students might ask each other: What are the questions that you're trying to answer? Why do you want to know this? What do you already know? Where are you going to look to find the answers? What are the key words that you think will help you search?

### **Self-Questioning**

Student self-assessment may be most effective when students learn to question themselves throughout the learning process. Teachers and librarian can scaffold self-questioning by providing questions that are specifically designed around the targeted skills, responsibilities, and dispositions for each learning experience. The following generic examples are provided for all four of the standards in *Standards for the 21<sup>st</sup>-Century Learner*.

Teachers and librarians may choose to invite students to participate in self-questioning by clearly communicating the value and purpose through a message similar to the sample provided.

#### **A Message to the Student**

As a student living and learning in the 21<sup>st</sup> Century, your life is filled with accessibility and opportunities to interact with information and ideas in many formats. In school and at home there are many ways to retrieve information. As a learner you face many challenges. Electronic and print resources are very diverse and present information in a wide variety of formats. You have to possess the skills for finding information and using that information appropriately and effectively. Your new understanding must be communicated to others using new tools and technologies. You live and work in a complex information landscape!

As you make your way toward a rapidly changing future, you are challenged to prepare yourself. As a 21<sup>st</sup> century learner you are challenged to learn content, learn how to learn, and think about how well you are learning and performing. You participate in this process in concert with your teachers and other students. Reflecting on your learning and process is called metacognition, meaning “thinking about thinking.”

In taking charge of your learning you:

- define your problem or task
- investigate solutions
- evaluate and change your process
- make decisions about the effectiveness of your work
- evaluate the final outcome.

The following questions can serve as a guide as you engage in navigating the rapidly changing information landscape.

#### **Standard 1: Inquire, think critically, and gain knowledge**

What interests me about this idea or topic?

Why am I doing this research?

How will I find out about this idea or topic?

What do I already know or think I know about this topic?

What background information would help me get an overview of my topic so that I can ask good questions and learn more about it?

What intriguing questions do I have about the topic or idea? Can my questions be answered through investigation?

What do I expect to find?

What is my plan for research?

What are all the sources that might be used?

Which sources will be most useful and valuable?

How do I locate these sources?

Have I located sources with diverse perspectives?

How do I find the information within each source?

How do I evaluate the information that I find?

Have I found enough accurate information to answer all my questions?

Have I discovered information gaps and filled them with more research?

Have I begun to identify relationships and patterns and thoughtfully reacted to the information I found?

Have any main ideas emerged from the research?

How well did my inquiry process go?

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge**

How does the evidence I found help me form an opinion or support my thesis?

What organizational patterns will help me make sense of my information?

What technology tools will help me organize and make sense of my information?

What decisions or conclusions have I drawn and how are they supported by the evidence?

What new understandings did I develop about the topic or idea?

How do those new understandings apply to other situations or contexts?

What did I learn about inquiry?

What new questions do I now want to answer about the topic or idea?

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society**

What type of product or presentation will allow me to present my conclusions and evidence effectively to the intended audience?

How have I organized the product/presentation to make my major points and present convincing evidence?

What technology will help me create a product or presentation?

How will I get help to revise and edit my product?

How well does my product/presentation fulfill all the requirements of the assignment?

How can I make my product/presentation as effective as possible?

How can I get feedback on my final product to use in my next inquiry project?

How have I contributed to the learning of others?

How have I shown responsibility in finding and using information in an ethical way?

**Standard 4: Pursue personal and aesthetic growth**

Why am I interested in this idea? How does it connect to what's important to me personally?

How can I find interesting information about this idea?

Why does this author or genre appeal to me? What other genres have I tried?

How can I make sense of information that is scattered among many different sources, both in print and online?

How does this compare to other things I've read or viewed?

Why did the author or creator produce this?

Does this work give me a slanted picture of the world?

How can I share this experience with others?

How can I use technology to communicate and interact with others?

How can I express my own ideas creatively and effectively?



## 6. Benchmarks and Action Examples

The AASL *Standards for the 21<sup>st</sup>-Century Learner* will have a positive effect on student achievement when the standards are translated into the teaching and learning that happens every day in the library and classrooms of the school. The learning skills, dispositions, responsibilities, and self-assessment strategies presented in these standards must be explicitly taught by library media specialists and classroom teachers in the context of classroom curriculum. Students and teachers will find that content learning is enhanced as students develop their repertoire of skills, strategies, attitudes and commitment toward learning.

To facilitate the process of bringing the *Standards for the 21<sup>st</sup>-Century Learner* alive in school instructional programs, the following sections present Action Examples for library units and lessons on the new standards. The examples have been divided into sections by the benchmark years of grades 2, 5, 8, 10, and 12. All benchmark-year sections include the skills that might be taught at those grades so that students develop complex and sophisticated learning skills over the course of their years in school. In addition, each section includes example lessons with a description of the instructional context.

These Action Examples represent a variety of content areas, library contexts, and collaboration levels in order to outline possibilities for implementation of the *Standards for the 21<sup>st</sup>-Century Learner* in any school situation. No Action Example is intended to be prescriptive or complete, but each is offered as a framework upon which library media specialists can build instructional programs that support all students in their development as empowered 21<sup>st</sup>-century learners.

The following grid outlines the Action Examples included in the following sections.

Grade	Skill	Disposition	Responsibility	Self-Assessment	Content Area	Content Topic	Library Context	Level of Collaboration
K	1.1.2	3.3.5	2.3.1	2.4.3	Language Arts/Health/Social Studies	Community Helpers	Flexible Lesson in a unit	Moderate
1	3.1.1 3.1.3 3.1.4	2.2.4	1.3.4	1.4.2	Science	Insect investigation	Flexible Multiple lessons in a unit	Moderate
2	1.1.1 1.1.3 1.1.4 1.1.6	1.2.1 4.2.3 1.2.5 1.2.6	1.3.3 1.3.5	1.4.2 1.4.4 2.4.1 2.4.3	History	African American history	Flexible Multiple lessons in a unit	Intensive
3	1.1.6	2.2.4	NA	1.4.4	Political Science/ Civics	Branches of government	Combination Stand alone lesson	Limited
4	2.1.6	2.2.4	1.3.5	3.4.2	Science/ Technology	Parts of the food web	Fixed Stand alone lesson	None
5	1.1.3	1.2.1	NA	2.4.2 3.4.2	Health	Nutritional value of snack foods	Fixed Lesson in a unit	Intensive
6	3.1.5	2.2.4	2.3.1	4.4.5	Science	Energy sources and the environment	Flexible Multiple lessons in a unit	Intensive
7	1.1.4 1.1.5	1.2.1 1.2.4	1.3.3	1.4.1 1.4.2	Social Studies/ Language Arts/ Technology	Community history	Flexible Multiple lessons in a unit	Intensive
8	3.1.4 3.1.6	2.2.4 3.2.1	3.3.5 3.3.7	1.4.1 3.4.2	Science/Math/ Language Arts	Global warming	Combination Multiple lessons in a unit	Moderate

<b>9</b>	4.1.7	4.2.1 4.2.2	4.3.1 4.3.4	1.4.2 1.4.4 4.4.1	English/ Technology	Favorite author	Individualized instruction	None
<b>10</b>	2.1.4	2.2.3	3.3.4	1.4.3	Math	Comparing data using InspireData software	Flexible Stand alone	Limited
<b>11-12</b>	4.1.3	3.2.3	3.3.7	2.4.2	English/ Language Arts	Folktales and culture	Flexible Multiple lessons in a unit	Intensive

## 6a. Benchmarks to Achieve by Grade 2

<b>Standard 1: Inquire, think critically, and gain knowledge.</b>
<b>Strand 1.1: Skills</b>
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>
<ul style="list-style-type: none"> <li>Follow a modeled inquiry process during each visit to the library to do research.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>
<ul style="list-style-type: none"> <li>Connect ideas to own interests.</li> <li>Share what is known about the general topic to elicit and make connections to prior knowledge.</li> <li>Identify one or two key words about a topic, problem, or question.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>
<ul style="list-style-type: none"> <li>Formulate questions related to listening activities.</li> <li>Ask “I wonder” questions about the research topic.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>
<ul style="list-style-type: none"> <li>Understand the basic organizational structure of books.</li> <li>Distinguish between fiction and nonfiction books.</li> <li>Associate Dewey numbers with areas of interest.</li> <li>Select and use appropriate sources, including picture dictionaries, beginning encyclopedias, magazines, maps, and globes, to answer questions.</li> </ul>
<b>Indicator 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.</b>
<ul style="list-style-type: none"> <li>Recognize facts.</li> <li>Find facts that answer specific questions.</li> <li>Interpret information represented in pictures, illustrations, and simple charts.</li> </ul>
<b>Indicator 1.1.6: Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.</b>
<ul style="list-style-type: none"> <li>Use simple note-taking strategies as demonstrated by librarian.</li> <li>Write, draws or verbalize the main idea and supporting details.</li> </ul>
<b>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</b>
<ul style="list-style-type: none"> <li>Summarize or retell key points.</li> </ul>
<b>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing inquiry.</b>
<ul style="list-style-type: none"> <li>Recognize the purpose of the online catalog to locate materials.</li> <li>Use online encyclopedias and magazine databases with guidance.</li> </ul>
<b>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</b>
<ul style="list-style-type: none"> <li>Listen to others with respect.</li> <li>Share knowledge and ideas with others by discussion and listening.</li> </ul>

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

**Strand 2.1: Skills**

**Indicator 2.1.1: Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.**

- Find facts to answer questions in more than one source.
- Write, draw, or verbalize supporting details.
- Note similarities and differences in information from different sources.
- Answer the question, "What is this mostly about?"

**Indicator 2.1.2: Organize knowledge so that it is useful.**

- Demonstrate simple organizational skills such as sorting and categorizing.
- Organize information into different forms (charts, drawings).

**Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.**

- Revisit and complete K-W-L or other graphic organizer using the new ideas that were learned during the inquiry experience.
- Compare new ideas with what was known at the beginning of the inquiry.
- Make inferences regarding the topic at the conclusion of a theme or research project with guidance.
- Draw a conclusion about the main idea with guidance.

**Indicator 2.1.4: Use technology and other information tools to analyze and organize information.**

- Use word processing and drawing tools to create written product.

**Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.**

- Share information and ideas with others by discussion and listening.
- Create individual or collaborative projects to share with others.
- Work in groups to create and evaluate simple information products (poster, diorama).

**Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.**

- Follow steps of writing process modeled by librarian or teacher: pre-writing, drafting, revising, editing, publishing.
- Begin to understand concept of "audience."
- Use basic grammar conventions.
- Identify the names of sources used.
- Make changes based on teacher/librarian feedback and suggestions.
- Use multiple intelligences to create end products.

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

**Strand 3.1: Skills**

**Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.**

- Present facts and simple answers to questions.
- Use simple rubrics to assess work.
- Identify own strengths and set goals for improvement.
- Reflect at the end of an inquiry experience about new ideas to wonder about and investigate.

**Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.**

- Participate in discussions and listen well.
- Show respect for the ideas of others.
- Give positive feedback.
- Respect rules and procedures as responsible library users.
- Share favorite literature, both fiction and nonfiction.
- Participate in discussions on fiction and nonfiction related to curriculum.
- Begin to create collaborative projects.
- Share research and creative products with others, using diverse formats, both print and non-print.

**Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.**

- Choose and maintain a focus in a piece of writing.
- Add details from personal experience and research to support ideas.
- Present information and main ideas in a variety of ways (e.g., art, music, podcast, poetry, movement, verbally, and/or written language).

**Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.**

- Begin to use technology to meet information needs.
- Use a variety of developmentally appropriate media to communicate ideas relevant to the curriculum, classmates, families, and others.

**Indicator 3.1.5: Connect learning to community issues.**

- Find personal connection to inquiry topic.
- Identify a real-world need and pursue questions and answers about it.

**Indicator 3.1.6: Use information and technology ethically and responsibly.**

- Respect ideas of others.
- Recognize the right to express own opinion in an appropriate manner.
- Answer research questions with words and phrases from sources, but not by copying whole sentences.
- Credit sources by citing author and title.
- Follow school guidelines related to use of technology.
- Demonstrate how to work cooperatively with peers, family members, and others when using technology in the classroom, library, or home.
- Distinguish between acceptable and unacceptable computer use.

<b>Standard 4: Purse personal and aesthetic growth.</b>
<b>Strand 4.1: Skills</b>
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>
<ul style="list-style-type: none"> <li>• Discuss favorite books and authors through the exposure to author studies and series books.</li> <li>• Distinguish between what is real and what is not real.</li> <li>• Begin to seek information to find out about/learn about an area of personal interest.</li> <li>• Request/choose materials related to personal interests.</li> <li>• Begin to recognize that different genres require different reading, listening, or viewing strategies.</li> <li>• Read, view, and listen to a variety of fiction and nonfiction for enjoyment and information.</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>
<ul style="list-style-type: none"> <li>• Demonstrate understanding that authors and illustrators of both narrative and expository texts are real people.</li> <li>• Read widely to find out about self and the surrounding world.</li> <li>• Make predictions about what will happen next in a story.</li> <li>• Draw conclusions about main idea of a story.</li> <li>• Connect an illustration to a story.</li> <li>• Compare characters in two different stories, or plots in two stories by the same author.</li> <li>• Retell a story using own words and pictures.</li> </ul>
<b>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</b>
<ul style="list-style-type: none"> <li>• Listen to/read multicultural texts from various genres.</li> <li>• Express feelings about characters and events in a story.</li> <li>• Make connections between literature and own experiences.</li> <li>• Respond to imaginative stories and performances.</li> <li>• Retell stories using the correct sequence of events.</li> <li>• Identify plot, characters, times, and places in a story.</li> </ul>
<b>Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.</b>
<ul style="list-style-type: none"> <li>• Select picture, fiction, and information books on a regular basis; try some books in other genres (poetry, fairy tales).</li> <li>• Select texts in various formats based on suggestions from teacher or librarian and personal interest.</li> <li>• Select some books at the appropriate reading level, other books to be read aloud, and other more challenging books of particular interest for browsing and enjoyment.</li> <li>• Begin to explore and examine the various genres and formats based on personal interests.</li> <li>• Explain personal criteria for selecting a book, poem, or story.</li> <li>• Select books, poems, tapes or other formats based on teacher-selected criteria, or because the stories or authors are favorites.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>
<ul style="list-style-type: none"> <li>• When starting to read a book, tap into previous knowledge about the author or subject by discussing with friend, teacher, or parent.</li> <li>• Demonstrate comprehension of stories read independently and stories read by the librarian.</li> <li>• Develop criteria for deciding if a book matches interests and reading level.</li> <li>• Find fiction and nonfiction books that are interesting (subject, text, pictures, graphics). Read them independently or ask for them to be read aloud by librarian or parent.</li> </ul>
<b>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</b>
<ul style="list-style-type: none"> <li>• Take notes using graphic organizer provided by teacher or librarian.</li> <li>• Draw pictures of main ideas.</li> </ul>
<b>Indicator 4.1.7: Use social networks and information tools to gather and share information.</b>
<ul style="list-style-type: none"> <li>• Identify ways that technology can help solve problems.</li> <li>• Identify personal interest and seek help in using technology to find information about it.</li> <li>• Utilize print, non-print, and electronic sources with guidance from the librarian to find information.</li> <li>• Begin to experiment with online catalog and Internet resources to locate information.</li> </ul>

<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>
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- |   |
|---|
| <ul style="list-style-type: none"><li>• Express feelings about a story through pictures and words.</li><li>• Use technology tools to create and present ideas.</li><li>• Express own ideas through creative products in a variety of formats.</li></ul> |
|---|

## Action Example: Kindergarten

**GRADE: K**

**LIBRARY CONTEXT:**

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> Fixed              | <input checked="" type="checkbox"/> Flexible         | <input type="checkbox"/> Combination                | <input type="checkbox"/> Individualized Instruction |
| <input type="checkbox"/> Stand-alone lesson | <input checked="" type="checkbox"/> Lesson in a unit | <input type="checkbox"/> Multiple lessons in a unit |   |

**COLLABORATION CONTINUUM:**

- |                               |                                  |  |                                    |
|-------------------------------|----------------------------------|--|------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Limited | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Intensive |
|-------------------------------|----------------------------------|--|------------------------------------|

**CONTENT TOPIC:** Community helpers

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 1** Inquire, think critically and gain knowledge

**Skills Indicator(s):**

**1.1.2** Use prior and background knowledge as context for new learning.

**Benchmark(s):**

- Derive meaning from information presented creatively in a variety of formats.
- Ask and respond appropriately to basic questions.
- Use graphic organizers.

**Dispositions Indicator(s):**

**3.3.5** Contribute to the exchange of ideas within and beyond the learning community.

**Responsibilities Indicator(s):**

**2.3.1** Connect understanding to the real world

**Self-Assessment Strategies Indicator(s):**

**2.4.3** Recognize new knowledge and understanding

**SCENARIO:**

*When meeting with the Kindergarten teachers during their monthly planning meeting, the school library media specialist (SLMS) participates in the planning of an upcoming unit on community helpers and what they do for our community. The curriculum objectives state that students should not only be able to name various community helpers such as the doctor, nurse, policeman, firefighter, teacher, and principal, but also identify what helpers contribute through their actions to make them a vital part of our community. The SLMS states that there are several literature choices that will support these objectives and volunteers to work with the teachers to create a lesson. The SLMS goes on to brainstorm with the teachers on this lesson idea. They agree that the SLMS will identify appropriate resources for the team, select literature for the lesson, and design a graphic organizer that will be used on the interactive whiteboard during the lesson. The teachers plan to introduce the unit and then visit the media center for a lesson during the second week of the unit. Following the lesson, the teachers will continue to build on what*



*students have learned and also identify areas where students might need further assistance. Since flexible scheduling is in place, each teacher will sign up for a time that works for her class.*

### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade K Social Studies: The students can identify various workers and their jobs in the community
- Content Standards for Grade K Health: The student can name people in the school and community who provide health support for others
- Content Standards for Grade K Language Arts: The student can use knowledge of the conventions of language and texts to construct meaning for a range of literary and informational texts for a variety of purposes

### **OVERVIEW:**

In a theme unit on community helpers, Kindergarten students will name a range of community helpers and be able to describe how they perform their major roles. The essential questions for this unit include: Who are community helpers? How do they help us?

### **FINAL PRODUCT:**

Students complete an SLMS-created graphic organizer that connects community helpers with the tools they need to do their jobs. Each student will choose one helper to explain how he or she uses their tools in their role they play in the community.

### **LIBRARY LESSON(S):**

Students will learn that they need to recall prior knowledge from their own experiences, and classroom learning.

### **ESTIMATED LESSON TIME:**

30 minutes

### **ASSESSMENT**

- **Product**
  - SLMS and teacher assess the completed graphic organizers on the following criteria: (1) correct match of helper with tool, (2) checklist that each student illustrates understanding of how their chosen community helper uses their tools to make a contribution to the community.
- **Process**
  - SLMS and teacher observe students as they work on their graphic organizers and listen as they describe the connection between the tools their chosen community helper uses and their role in the community.
- **Student self-questioning**
  - Did I understand my task?
  - Did I listen carefully enough to find the information I need?
  - Did I use information I already knew?
  - Did I participate and contribute to the group learning activity?

## INSTRUCTIONAL PLAN

- **Resources students will use:**

- ☐ Online subscription database(s) ☐ Web sites ☒ Books ☐ Reference
- ☐ Nonprint ☐ Periodicals/newspapers
- ☐ Other (list):

- **Instruction/activities**

- **Direct Instruction:** Engage students by showing the book cover chosen for the lesson on the interactive whiteboard with photographs of community helpers rotating through as class comes in. Begin with a discussion about what they know about community helpers from personal experience or from classroom instruction. SLMS and teacher review with students what they have been learning in their classroom to make connections and identify purpose for the lesson. The SLMS then reads the literature selection questioning and emphasizing key points throughout the story.
- **Modeling and guided practice:** SLMS explains the graphic organizer and demonstrates how to use it and the interactive whiteboard by modeling an example with the teacher.
- **Independent practice:** To demonstrate what they have learned by accurately completing the graphic organizer, students volunteer to come up to the whiteboard and connect the community helper picture with the tools that they need to do their job
- **Sharing and reflecting:** Students each chose one helper and explain to the group how the helper uses those tools to play their part in a community.

# Action Example: Grade 1

**GRADE: 1**

**LIBRARY CONTEXT:**

- ☐ Fixed      ☒ Flexible      ☐ Combination      ☐ Individualized Instruction
- ☐ Stand-alone lesson      ☐ Lesson in a unit      ☒ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None      ☐ Limited      ☒ Moderate      ☐ Intensive

**CONTENT TOPIC:** Insect investigation

***STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS***

**Standard: 3** Share knowledge and participate ethically and productively as members of our democratic society.

**Skills Indicator(s):**

**3.1.1** Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.

**3.1.3** Use writing and speaking skills to communicate new understandings effectively.

**3.1.4** Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.

**Benchmark(s):**

- Use simple rubrics to assess work.
- Present information and main ideas in a variety of ways (e.g., art, music, podcast, poetry, movement, verbally, and/or written language).
- Use a variety of developmentally appropriate media to communicate ideas relevant to the curriculum, classmates, families, and others.

**Dispositions Indicator(s):**

**2.2.4** Demonstrate personal productivity by completing products to express learning.

**Responsibilities Indicator(s):**

**1.3.4** Contribute to the exchange of ideas within the learning community.

**Self-Assessment Strategies Indicator(s):**

**1.4.2** Assess the quality and effectiveness of the learning product.

**SCENARIO:**

*First graders discover a strange looking insect on the school playground during recess. Their teacher captures the bug in a jar and asks for three student volunteers to be the “bug detectives” for the class. She enlists the help of the school library media specialist (SLMS) to assist the trio. The students and the SLMS browse through the library’s resources with no luck. Ultimately, the SLMS helps the students email an entomologist at the local university, who identifies the insect*

*as an assassin bug. This really excites the students and motivates them to search for more information. The SLMS not only helps the students gather details on the bug but she gets the technology resource teacher to help the students prepare a two-minute video on the bug for airing on the school's closed circuit television system. The SLMS takes the lead in working with the three students as they draft their script, rehearse it, and critique their work before taping it. The teacher releases these students to work in the library while other students in the class are working on science-related activities.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 1 Science: The student can ask questions about objects, organisms, events, places, or relationships in the environment.
- Content Standards for Grade 1 Language Arts: The student can construct meaning by asking and answering who, what, when, why, where, and how questions about what is read.
- Content Standards for Grade 1 Language Arts: The student can present ideas in a logical order or sequence that is easy to follow.
- Content Standards for Grade 1 Technology: The student can demonstrate creative thinking and construct knowledge using technology.

#### **OVERVIEW:**

First grade students undertake a mini-investigation in which they identify a strange looking insect, collect information on the insect, and communicate their findings to the rest of their class and the entire school. The young investigators fashion their presentation around the essential question: What should people know about this insect? Why would it be important for people to know these facts about it?

#### **FINAL PRODUCT:**

Students develop a two-minute video on their findings that is aired on closed circuit television.

#### **LIBRARY LESSON(S):**

Students work with the SLMS in a series of five sessions focusing on the creation of the video presentation. In these sessions the students collaboratively select the major facts they wish to share about the insect, divide the scripting work, draft the segments, rehearse the parts, and critique each other's performance.

#### **ESTIMATED LESSON TIME:**

Five sessions, times vary from 30 to 60 minutes.

#### **ASSESSMENT**

- **Product**
  - Classmates critique the final video performance using a simple rubric devised by the SLMS. The rubric includes criteria on content accuracy, organization, delivery, and visual support used.
- **Process**
  - The SLMS and the three students producing the video also use the same rubric to critique performances during rehearsals.

- **Student self-questioning**
  - Are all my facts correct?
  - Will others understand my message?
  - Am I making the presentation interesting?

#### INSTRUCTIONAL PLAN

- **Resources students will use:**
  - ☐ Online subscription database(s)    ☒ Web sites    ☒ Books    ☐ Reference
  - ☐ Nonprint    ☐ Periodicals/newspapers
  - ☐ Other (list):

- **Instruction/activities**

Note: This particular session focuses on having the students analyze their writing and speaking skills as they rehearse for the video performance.

- **Direct instruction:** Tap prior knowledge by asking students what would make a good video performance. Create a list. Share the rubric created by the SLMS and compare the criteria on the rubric with the list that the students have contributed. Go over the criteria together.
- **Modeling and guided practice:** Have the students use the rubric to critique the SLMS as she models a mock performance that requires more work. Share the critiques.
- **Independent practice:** Have each student, in turn, rehearse his or her performance. Along with the SLMS, the students critique each other's performance using the rubric.
- **Sharing and reflecting:** As a group, the students and SLMS exchange critiques. Have students identify areas where they did well and areas that they need to work on. Encourage them to practice in front of their families at home and invite critiquing of performances.

## Action Example: Grade 2

**GRADE: 2**

**LIBRARY CONTEXT:**

- ☐ Fixed      ☒ Flexible      ☐ Combination      ☐ Individualized Instruction
- ☐ Stand-alone lesson      ☐ Lesson in a unit      ☒ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None      ☐ Limited      ☐ Moderate      ☒ Intensive

**CONTENT TOPIC:** African American history

***STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS***

**Standard: 1** Inquire, think critically, and gain knowledge.

**Skills Indicator(s):**

**1.1.1** Follow an inquiry based process in seeking knowledge in curricular subjects, and make the real world connection for using this process in own life.

**1.1.3** Develop and refine a range of questions to frame the search for new understandings.

**1.1.4** Evaluate information found in selected sources on the basis of appropriateness for needs and importance

**1.1.6** Read, view and listen for information presented in any format in order to make inferences and gather meaning.

**Benchmarks**

- Find facts to answer questions in more than one source.
- Organize information into different forms (charts, drawings).
- Make inferences regarding the topic at the conclusion of a theme or research project with guidance.
- Follow steps of writing process modeled by librarian or teacher: pre-writing, drafting, revising, editing, and publishing.
- Identify the names of sources used.
- Make changes based on teacher/librarian feedback and suggestions.

**Dispositions Indicator(s)**

**1.2.1** Display initiative and engagement by posing questions and investigating the answers beyond the collection of superficial facts.

**4.2.3** Demonstrate creativity by using multiple resources and formats.

**1.2.5** Demonstrate adaptability by changing the inquiry focus, questions, resources or strategies when necessary to achieve success.

**1.2.6** Display emotional resilience by persisting in information searching despite challenges.

**Responsibilities Indicator(s):**

**1.3.3** Follow ethical guidelines in gathering and using information.

**1.3.5** Use information technology responsibly.

**Self-Assessment Strategies Indicator(s):**

**1.4.2** Use interaction with and feedback from teachers and peers to guide own inquiry process.

**1.4.4** Seek appropriate help when it is needed.

**2.4.1** Determine how to act on information (accept, reject, modify)

**2.4.3** Recognize new knowledge and understanding

**SCENARIO:**

*The school library media specialist (SLMS) meets with each grade level during their planning meetings at least once a month. Second grade teachers ask the SLMS to help them plan the final social studies unit of the year that covers famous African American historical figures. The SLMS suggests that this would be a great opportunity to reinforce some information literacy skills previously taught in the year and to address additional skills with a research process project. Since these students have already completed some minor projects this year, they have previous experience in working with graphic organizers, reading biographies, using the table of contents and index, locating information in encyclopedias and taking notes.*

*The SLMS and the teachers work together to plan out the unit and what role each will play in the teaching and assessment. The teachers will introduce the unit with a book about Rosa Parks and a basic streaming video about famous African Americans and the struggle for civil rights. The SLMS and teachers create a list of historical names based on curricular standards. The teacher will have students choose a historical figure and introduce the project before coming to the media center. The teachers and the SLMS work together to create a graphic organizer that the students will use to organize the information they find. Research questions will be developed through a guided brainstorming activity. The SLMS will pull all related materials for this project and house them on a reserve shelf for the students. The SLMS will also create a hotlist of websites for each famous person that students can access at school or at home. The SLMS and teachers work together to create assessment rubrics. Since flexible scheduling is in place teachers work with the SLMS to schedule the various lessons and research time.*

**CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 2 Social Studies: The students will read about and describe the lives of historical figures in history.
- Content Standards for Grade 2 Social Studies: The student will give examples of how historical figures under study demonstrate positive citizenship traits (honesty, dependability, persistence, honor, civility...)
- Content Standards for Grade 2 Language Arts: The student can use knowledge of the conventions of language and texts to construct meaning for a range of literary and informational texts for a variety of purposes.
- Content Standards for Grade 2 Language Arts: The students will use the writing process and conventions of language and research to construct meaning and communicate effectively for a variety of purposes and audiences using a range of forms

**OVERVIEW:**

In a second grade unit on famous African Americans in history, students will apply the research process in a major project that involves several lessons.

**FINAL PRODUCT:**

The project culminates in a final typed essay, a portrait picture of the famous African American, and a presentation to the class of this work.

**LIBRARY LESSON(S):**

Students work with the SLMS in a series of four sessions where students will learn how to (1) develop questions that relate to and are of importance to their topic, (2) select a variety of resources to retrieve relevant information, (3) use a graphic organizer to organize the information collected, and (4) assess information to decide if it meets their needs.

**ESTIMATED LESSON TIME:**

Four sessions, time varies per session.

**ASSESSMENT**

• **Product**

- SLMS, teacher, and students assess final papers and presentations using rubrics that focus on main ideas and supporting details, organization, and language.

• **Process**

- SLMS and teacher review graphic organizers and conference notes completed by students to determine whether students (1) chose appropriate sources and information to fit their needs, (2) adapted as necessary, (3) named sources they used correctly, and (4) put information in their own words.

• **Student self-questioning**

- Did I understand my task?
- Was I able to come up with questions that were important to and related to my topic?
- Was I able to successfully use different resources to locate the information I needed?
- Was I able to determine if information I found answered my questions?
- Was I able to adapt my searching when needed?
- Did I ask for help when I needed it?

**INSTRUCTIONAL PLAN**

• **Resources students will use:**

- ☒ Online subscription database(s)    ☒ Web sites    ☒ Books    ☒ Reference
- ☒ Nonprint    ☐ Periodicals/newspapers
- ☐ Other (list):

• **Instruction/activities**

**Lesson 1**

- **Direct Instruction:** The SLMS and teacher review with the class what they learned earlier in the year about developing questions to guide their research.



- **Modeling and guided practice:** They use an interactive whiteboard to brainstorm questions with the class about what is important to know about their historical figures. Ideas are listed on the whiteboard.
- **Independent practice:** Students write the three questions they think are most important on their graphic organizers.
- **Sharing and reflecting:** The class discusses the questions they have chosen and come to consensus on the three main questions they will answer about their historical figures.

### **Lessons 2 and 3**

- **Direct Instruction:** The SLMS reviews skills that students learned previously in the year about types of resources they can use, putting information in their own words and not copying, locating information within a text, and giving credit to sources.
- **Modeling and guided practice:** The SLMS follows this review with some examples to refresh students' memory, emphasizing how to decide if something they read is important and related to their topic.
- **Independent practice:** Students use the remaining time in this visit to browse through resources for needed information. The next time they come to the library, they use the various resources in the media center, including a website list, to locate information.
- **Sharing and reflecting:** Each student writes down the best source they have found and why it is the best one on a card which they give to the SLMS before they return to their classroom.

### **Lesson 4**

- **Direct Instruction:** The SLMS and teacher explain a checklist they will use to conference with each student to see how they are progressing.
- **Modeling and guided practice:** Using the checklist students have completed prior to their conferences, the SLMS and teacher help the students determine their problem areas and provide guidance as needed.
- **Independent practice:** While the SLMS or teacher conference with individual students, the rest of the class continues to use various resources to locate information. Should students require more time to complete their information gathering, their teacher will allow them to visit the media center to work independently or with assistance from the SLMS.
- **Sharing and reflecting:** Students complete their checklists to monitor their own progress and uncover problem areas for which they need assistance.

## 6b. Benchmarks to Achieve by Grade 5

<b>Standard 1: Inquire, think critically, and gain knowledge.</b>
<b>Strand 1.1: Skills</b>
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>
<ul style="list-style-type: none"> <li>Follow a process whenever pursuing new information through inquiry or research.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>
<ul style="list-style-type: none"> <li>Connect ideas in text to own interests.</li> <li>Generate a list of key words for a research-based project with guidance.</li> <li>Use sources to acquire background information.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>
<ul style="list-style-type: none"> <li>Formulate questions about the topic with guidance.</li> <li>Predict answers to inquiry questions based on background knowledge and beginning observation or experience.</li> <li>Assess questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>
<ul style="list-style-type: none"> <li>Understand the 10 major Dewey areas and what main topics are included in each.</li> <li>Use text features and illustrations to decide which resources are best to use and why.</li> <li>Select and use appropriate sources, including specialized reference sources and periodical databases, to answer questions.</li> <li>Use multiple resources, including print, electronic, and human, to locate information.</li> </ul>
<b>Indicator 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.</b>
<ul style="list-style-type: none"> <li>Distinguish between fact and opinion.</li> <li>Evaluate facts for accuracy.</li> <li>Determine important and unimportant details.</li> <li>Identify facts and details that support main ideas.</li> <li>Select information to answer questions or solve a problem.</li> </ul>
<b>Indicator 1.1.6: Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning</b>
<ul style="list-style-type: none"> <li>Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).</li> <li>Paraphrase or summarize information.</li> <li>Draw conclusions based on facts and premises.</li> </ul>
<b>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</b>
<ul style="list-style-type: none"> <li>Recognize when facts from two different sources conflict and seek additional sources to verify accuracy.</li> <li>Recognize own misconceptions when new information conflicts with previously held opinions.</li> </ul>
<b>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing inquiry.</b>
<ul style="list-style-type: none"> <li>Search an online catalog to locate materials.</li> <li>Use selected Websites and periodical databases to find appropriate information.</li> <li>Use selected search engines to find appropriate information.</li> <li>Use software or online tools (e.g., word processing, wikis, graphic organizers) to record and organize information.</li> </ul>
<b>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</b>
<ul style="list-style-type: none"> <li>Contribute to project teams in producing original works or solve problems.</li> <li>Respect others' opinions through active listening and questioning.</li> </ul>

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

**Strand 2.1: Skills**

**Indicator 2.1.1: Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.**

- Use different clues (placement in text, signal words, focal point of illustration) to determine important ideas in illustrations and text.
- Identify facts and details that support main ideas.
- Restate and respond with detailed answers to factual questions.
- Find similar big ideas in more than one source.
- Question the differences between sources and seek additional sources to resolve.
- Make inferences with guidance.
- Analyze and evaluate new information based on previous experience and knowledge.

**Indicator 2.1.2: Organize knowledge so that it is useful.**

- Organize notes and ideas to form responses to questions
- Organize the information in a way that is appropriate for the assignment or question.
- Use common organizational patterns to make sense of information (chronological order, main idea with supporting ideas).

**Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.**

- Review ideas held at beginning of inquiry and reflections captured during note-taking.
- Match information found with questions and predictions.
- Make inferences about the topic at the conclusion of a research project.
- Draw a conclusion about the main idea.
- Identify connections to the curriculum and real world.

**Indicator 2.1.4: Use technology and other information tools to analyze and organize information.**

- Use word processing, drawing tools, presentation software, graphing software, and other productivity software to illustrate concepts and convey ideas.

**Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.**

- Express own ideas appropriately and effectively while working in groups to identify and resolve information problems.
- Create individual or collaborative projects to share with others.
- Work in groups to create and evaluate information products.
- Work in groups to create pictures, images, and charts for development of word-processing reports and electronic presentations.

**Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.**

- Use pre-writing to brainstorm ideas for most effective way to present conclusions.
- Determine audience before creating product.
- Draft the presentation/product following an outline of ideas and add supporting details.
- Create a product with a beginning, middle, and end.

## **Standard 3: Share knowledge and participate ethically and productively as members of our democratic society**

### **Strand 3.1: Skills**

#### **Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.**

- Present information clearly so that main points are evident.
- Use information appropriate to task and audience.
- Identify and evaluate the important features for a good product.
- Identify own strengths and set goals for improvement.
- Reflect at the end of an inquiry experience about what ideas would still be interesting to pursue.

#### **Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.**

- Show respect for and respond to ideas of others.
- Describe or restate ideas of others accurately.
- Acknowledge personal and group achievements.
- Rely on feedback to improve product and process.
- Respect the guidelines for responsible and ethical use of information resources.
- Share favorite literature.
- Develop projects that can be shared electronically and can challenge other students to answer questions or give opinions adding to the content (e.g., shared book reviews, shared PowerPoint presentations).
- Participate in discussions on fiction and nonfiction related to curriculum.
- Develop a product with peers.
- Share research and creative products with others.

#### **Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.**

- Use significant details and relevant information to develop meaning.
- Present information coherently in oral, written, and visual sequence.
- Use clear and appropriate vocabulary to convey the intended message.
- Speak clearly to convey meaning.

#### **Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.**

- Use different technology tools for research to meet information needs.
- Use a variety of media and formats to create and edit products that communicate syntheses of information and ideas to multiple audiences.

#### **Indicator 3.1.5: Connect learning to community issues.**

- Gather ideas and information from different points of view.
- Base opinions on information from multiple sources of authority.
- Recognize the value of freedom of speech.
- Connect ideas and information to situations and people in the larger community.

#### **Indicator 3.1.6: Use information and technology ethically and responsibly.**

- Respect ideas of others.
- Examine the concept of freedom of speech.
- Express own opinion in an appropriate manner.
- Answer research questions with words and phrases from sources, but not by copying whole sentences.
- Understand the concept of plagiarism. Understand that authors and illustrators own their writings and art and it is against the law to copy their work.
- Credit all sources properly with title, author, and page number.
- Follow school guidelines related to use of technology.
- Observe Internet safety procedures including safeguarding personal information.
- Practice responsible use of technology and describe personal consequences of inappropriate use.
- Respect privacy of others (e-mail, files, passwords, book checkout).

<b>Standard 4: Pursue personal and aesthetic growth.</b>
<b>Strand 4.1: Skills</b>
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>
<ul style="list-style-type: none"> <li>• Participate in book talks and book discussion groups.</li> <li>• Seek information about personal interests, and ask for help in locating it when necessary.</li> <li>• Set reading goals.</li> <li>• Read, listen to, and view a variety of fiction and nonfiction for enjoyment and information.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to explore personal interests.</li> <li>• Visit the public library to attend programs and check out materials to read</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>
<ul style="list-style-type: none"> <li>• Use evidence from the text to discuss the author's purpose.</li> <li>• Read widely to explore new ideas.</li> <li>• Make predictions and inferences about events and characters.</li> <li>• Identify problems and solutions in a story.</li> <li>• Draw conclusions about the theme of a story.</li> <li>• Describe how an illustrator's style, elements, and media represent and extend the meaning of the story or the narrative text.</li> <li>• Connect story to previous reading.</li> <li>• Recognize features of various genres and use different reading strategies for understanding.</li> <li>• Demonstrate knowledge of favorite authors, genres, etc.</li> </ul>
<b>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</b>
<ul style="list-style-type: none"> <li>• Connect own feelings to emotions, characters, and events portrayed in a literary work.</li> <li>• Use personal experiences to stimulate responses to literature and art.</li> <li>• Understand and restate ideas presented through creative formats.</li> <li>• Identify story elements in various fiction genres.</li> <li>• Use evidence from stories to discuss characters, setting, plot, time, and place.</li> <li>• Discuss theme of stories, using evidence to support opinions.</li> </ul>
<b>Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.</b>
<ul style="list-style-type: none"> <li>• Select books from favorite authors and genres; try new genres when suggested.</li> <li>• Select texts in various formats based on a theme, topic, connection to classroom learning or personal interest.</li> <li>• Select both "just right" books and challenging books on a regular basis.</li> <li>• Recognize the works of a single author.</li> <li>• Recognize why some authors and genres have become favorites.</li> <li>• Select appropriate print, non-print and electronic materials on an individual level.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>
<ul style="list-style-type: none"> <li>• Use prior knowledge to understand and compare literature.</li> <li>• Understand literal meaning and identify the main points.</li> <li>• Compare the ideas in various types of resources to experiences in real life.</li> </ul>
<b>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</b>
<ul style="list-style-type: none"> <li>• Use simple graphic organizers and scaffolding available through technology software to capture the main ideas and their relationships to each other.</li> <li>• Use two-column approach to note-taking to capture personal connections to information.</li> </ul>
<b>Indicator 4.1.7: Use social networks and information tools to gather and share information.</b>
<ul style="list-style-type: none"> <li>• Identify ways that technology has been used to address real-world problems.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>
<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>
<ul style="list-style-type: none"> <li>• Present creative products in a variety of formats.</li> </ul>

- Express the mood and main ideas of a story through creative formats.
- Use software packages for artistic and personal expression.
- Use multimedia authoring tools for independent and collaborative publishing activities.

## Action Example: Grade 3

**GRADE: 3**

**LIBRARY CONTEXT:**

- ☐ Fixed      ☐ Flexible      ☒ Combination      ☐ Individualized Instruction
- ☒ Stand-alone lesson      ☐ Lesson in a unit      ☐ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None      ☒ Limited      ☐ Moderate      ☐ Intensive

**CONTENT TOPIC:** Branches of the United States government.

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 1** Inquire, think critically and gain knowledge

**Skills Indicator(s):**

**1.1.6** Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.

**Benchmark(s):**

- Use various note-taking strategies (e.g., outlining, questioning the text, highlighting, graphic organizers).
- Paraphrase or summarize information.
- Draw conclusions based on facts and premises.

**Dispositions Indicator(s):**

**2.2.4** Demonstrate personal productivity by completing products to express learning.

**Responsibilities Indicator(s):**

NA

**Self-Assessment Strategies Indicator(s):**

**1.4.4** Seek appropriate help when it is needed.

**SCENARIO:**

*Third grade teachers have informed the school library media specialist (SLMS) that they are ready to begin their annual unit on the U. S. government. The teachers want their students to be able to name the three branches of government, the officials, and the responsibilities of each branch. They have requested that the SLMS, as he has done in previous years, introduce the unit to the students with the Schoolhouse Rock song and video, Three-Ring Government. During their weekly 40-minute library class, the SLMS guides the students in listening and watching for these facts. Each student, with assistance from the SLMS, fills in a graphic organizer matching the name of each branch with its officials and major responsibilities. The SLMS also prepares a display of books related to the topic, both fiction and nonfiction, that the students may browse and/or borrow during their 10-minute book-selection time at the end of the class. The third grade*

*teachers continue with further instruction in their classrooms. In subsequent, specially arranged library visits, the SLMS assists students in selecting resources for assignments on this topic.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 3 Social Studies: The student can describe the purpose and structures of the three branches of the federal government.
- Content Standards for Grade 3 Language Arts: The student can explain the results of an investigation to an audience using simple data organizers (e.g., charts, graphs, pictures).

#### **OVERVIEW:**

In social studies class, third grade students identify the structure of the federal government and describe the roles and responsibilities of government officials. The essential question framing the unit is: How is our government organized?

#### **FINAL PRODUCT:**

Students complete a graphic organizer matching the names of the three branches of the federal government with the officials and major responsibilities of each branch.

#### **LIBRARY LESSON(S):**

Students will learn to listen and watch for information, then record and categorize it using a graphic organizer.

#### **ESTIMATED LESSON TIME:**

30 minutes

#### **ASSESSMENT**

- **Product**
  - Students complete an SLMS-created graphic organizer that resembles a circus' three rings. They must (1) correctly identify the three government branches, (2) correctly list the official(s) for each branch, and (3) include one major responsibility of each branch.
- **Process**
  - SLMS observes students as they work on their graphic organizers and participate with the class in completing an accurate model.
- **Student self-questioning**
  - Did I understand my task?
  - Did I listen carefully enough to find the information I need?
  - Did I complete the organizer with all of the information required?
  - Did I place information correctly in the graphic organizer?
  - Was all the information I included in the graphic organizer accurate?

#### **INSTRUCTIONAL PLAN**

##### **Resources students will use:**

- |  |   |                                |                                    |
|--|---|--------------------------------|------------------------------------|
| <input type="checkbox"/> Online subscription database(s)                               | <input type="checkbox"/> Web sites              | <input type="checkbox"/> Books | <input type="checkbox"/> Reference |
| <input checked="" type="checkbox"/> Nonprint: <i>Schoolhouse Rock</i> video, recording | <input type="checkbox"/> Periodicals/newspapers |                                |                                    |



☒ Other (list): Song lyrics

- **Instruction/activities**

- **Direct instruction:** The SLMS introduces the lesson by showing the students the *Schoolhouse Rock* video, *Three-Ring Government*. Following the viewing of the video, the SLMS displays a list of words from the song that pertain to the branches of the government on an interactive whiteboard and discusses their definitions with the class.
- **Modeling and guided practice:** The SLMS distributes the lyrics of the song to the class. While they listen to the song again, students raise their hands each time they hear a word about a branch of the government. The SLMS highlights these words on the whiteboard while the students circle them on their lyric sheets.
- **Independent practice:** Following a second viewing of the video, students label the three rings on their graphic organizers with the names of each branch and fill in the officials and major responsibility of the branches. The SLMS assists students who have questions.
- **Sharing and reflecting:** When the students have completed their own graphic organizers, they take turns filling in the information on an organizer projected on the whiteboard. Together they determine the correct placement of all the labels. Then they check the accuracy of their own results by comparing them with the completed organizer.

## Action Example: Grade 4

**GRADE: 4**

**LIBRARY CONTEXT:**

- ☐ Fixed      ☐ Flexible      ☐ Combination      ☐ Individualized Instruction
- ☒ Stand-alone lesson      ☐ Lesson in a unit      ☐ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☒ None      ☐ Limited      ☐ Moderate      ☐ Intensive

**CONTENT TOPIC:** Parts of a food web and major functions and relationships among the parts.

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 2** Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.

**Skills Indicator(s):**

**2.1.6** Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.

**Benchmark(s):**

- Draft the presentation/product following an outline of ideas and add supporting details.
- Create a product with a beginning, middle, and end.
- Select and present creative products in a variety of formats.

**Dispositions Indicator(s):**

**2.2.4** Demonstrate personal productivity by completing products to express learning.

**Responsibilities Indicator(s):**

**1.3.5** Use information technology responsibly.

**Self-Assessment Strategies Indicator(s):**

**3.4.2** Assess the quality and effectiveness of the learning product.

**SCENARIO:**

*A school library media specialist (SLMS) uses long range planning forms to prepare for an activity with a fourth grade class. The students are nearing the end of a science unit on ecology. The SLMS divides the students into teams of three and escorts them to the green space surrounding the school. Each team is given a digital camera and the direction to photograph producers, consumers, and decomposers in order to incorporate the collected images into a multimedia presentation on food webs. On the following visit to the library the students use the digital images and supportive text to create multimedia projects demonstrating the elements of a food web and the relationship between elements.*

## CONNECTION TO LOCAL OR STATE STANDARDS

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 4 Science: Illustrate and explain the relationships among producers, consumers, and decomposers in a food web.
- Content Standards for Grade 4 Educational Technology: Use technology tools (e.g., multimedia authoring, presentation, web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.

## OVERVIEW:

As a connection to a unit on ecology, fourth grade students are given the opportunity to create multimedia projects in which they use digital images and text to illustrate food webs. The essential question is: How do food webs work?

## FINAL PRODUCT:

Multimedia presentation

## LIBRARY LESSON(S):

Students will learn how to use a multimedia software application in order to create a presentation on food webs. Students will use library resources as necessary for reference.

## ESTIMATED LESSON TIME:

Two 45-minute lessons

## ASSESSMENT

- **Product**
  - Teacher, SLMS, and students use an SLMS-created rubric to assess the multimedia presentation on some of the following general criteria: content accuracy, organization, visuals and format.
- **Process**
  - Students complete exit passes at the end of each session to briefly describe progress as well as problems they may be encountering.
- **Student self-questioning**
  - What technology tools will help me organize and make sense of my information?
  - Do I have enough information to prepare my presentation?
  - What new understandings did I develop about the topic or idea?

## INSTRUCTIONAL PLAN

- **Resources students will use:**
  - ☒ Online subscription database(s)    ☒ Web sites    ☒ Books    Reference
  - ☒ Nonprint    Periodicals/newspapers
  - ☒ Other (list): digital cameras, Kidspiration®
- **Instruction/activities**

- **Direct instruction:** The SLMS will provide instruction in the use of digital cameras, transferring images from the camera to the computer, and how to use Kidspiration® to create a multimedia presentation
- **Modeling and guided practice:** Students will use digital cameras to collect images that will show parts of a food chain. They will explore and practice using the features of Kidspiration®.
- **Independent practice:** Students will use digital images and software to create a multimedia presentation and use library resources to create supportive text for the presentation.
- **Sharing and reflecting:** Students will share multimedia presentations in a gallery walk and complete a self evaluation rubric.

## Action Example: Grade 5

**GRADE: 5**

**LIBRARY CONTEXT:**

- ☒ Fixed      ☐ Flexible      ☐ Combination      ☐ Individualized Instruction
- ☐ Stand-alone lesson      ☒ Lesson in a unit      ☐ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None      ☐ Limited      ☐ Moderate      ☒ Intensive

**CONTENT TOPIC:** Nutritional value of snack food

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 1** Inquire, think critically and gain knowledge.

**Skills Indicator(s):**

**1.1.3** Develop and refine a range of questions to frame the search for new understanding

**Benchmarks:**

- Formulate questions about the topic with guidance
- Predict answers to inquiry questions based on background knowledge and beginning observation or experience.
- Assess questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry.

**Dispositions Indicator(s):**

**1.2.1** Display initiative and engagement by posing questions and investigating answers beyond the collection of superficial facts.

**Responsibilities Indicator(s):** NA

**Self-Assessment Strategies Indicator(s):**

**2.4.2** Reflect on systematic process, and assess for completeness of investigation

**3.4.2** Assess the quality and effectiveness of the learning product

**SCENARIO:**

*The school library media specialist (SLMS) attends a meeting of fifth grade teachers where they are discussing the annual Health Fair in which their students will focus on nutrition. The teachers want students to find information that goes beyond basic facts. The SLMS suggests a lesson for the students' next weekly 40-minute library visit in which they will learn how to construct higher-level questions. The team decides that the students will produce a brochure about healthy snacks. Together they determine criteria for the brochure and split other responsibilities. The teachers will introduce the unit and provide background information in the classroom; the SLMS will develop a lesson on questioning and a chart for students to record their questions. Subsequently, the teachers will continue instruction on this topic in their*

*classrooms and the SLMS will guide students through the process of selecting and using appropriate resources.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 5 Health: The student can explain the importance of a healthy diet as part of a healthy lifestyle.
- Content Standards for Grade 5 Language Arts: The student can conduct research by using effective questioning.

#### **OVERVIEW:**

Fifth grade students investigate the nutritional value of foods, specifically determining which snack foods are healthiest and prepare a brochure based on their research for the school health fair.

#### **FINAL PRODUCT:**

Students design and produce information brochures to distribute at the school health fair.

#### **LIBRARY LESSON(S):**

Students will identify the characteristics of higher-level questions. They will generate meaningful questions about the nutritional value of snack foods by creating a question chart that includes two columns: (1) factual questions and (2) higher-level questions.

#### **ESTIMATED LESSON TIME:**

30 minutes

#### **ASSESSMENT**

- **Product**
  - Teachers, the SLMS, and students use an instructor-designed rubric to assess the brochures on criteria including content accuracy, organization of information, visual content and layout, and creativity.
- **Process**
  - Teachers and SLMS use the question charts generated by students to determine (1) whether student pairs correctly identified higher-level as well as factual questions, and (2) whether all questions were relevant to the topic of snack foods.
- **Student self-questioning**
  - Did I show initiative by asking original questions?
  - Did I ask questions that went beyond basic information?
  - Will my questions lead me to find the information I need to produce an effective brochure?

#### **INSTRUCTIONAL PLAN**

##### **• Resources students will use:**

Online subscription database(s)	Web sites	Books	Reference
Nonprint	Periodicals/newspapers		

- ☑ Other (list): Question chart
- **Instruction/activities**
  - **Direct instruction:** Engage interest by sharing a display of different popular snack foods. Challenge students with the following questions: If you were to select the healthiest of these snack foods, which two would you pick? How would you know?
  - **Modeling and guided practice:** Discuss the types of questions students might ask. Distinguish between factual questions and higher-order levels of questions. Use a matrix with examples of both types of questions.
  - **Independent practice:** Students work in pairs to create question charts with two columns, Basic Questions and Higher-Level Questions.
  - **Sharing and reflecting:** If time permits in the library (or if the classroom teachers are willing to continue the activity in the classroom), have students exchange their charts with another pair to discern the similarities and differences in their questions.

## 6c. Benchmarks to Achieve by Grade 8

<b>Standard 1: Inquire, think critically, and gain knowledge</b>
<b>Strand 1.1: Skills</b>
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>
<ul style="list-style-type: none"> <li>Frame independent learning activities, whether personal or academic, around a critical-thinking process that involves asking questions, investigating the answers, and developing new understandings.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>
<ul style="list-style-type: none"> <li>State and verify what is known about the problem or question and make connections to prior knowledge.</li> <li>Revise the question or problem as needed to arrive at a manageable topic.</li> <li>Observe and analyze an experience, demonstration, or source that introduces a topic, problem, or question to gather background information.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>
<ul style="list-style-type: none"> <li>Write questions independently based on key ideas or areas of focus.</li> <li>Determine what information is needed to support the investigation and answer the questions.</li> <li>Analyze what is already known or what is observed or experienced to predict answers to inquiry questions.</li> <li>Refine questions that lead to gathering of different types of information (e.g., overview, big-idea, specific detail, cause and effect, comparison).</li> <li>Plan inquiry to answer questions.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>
<ul style="list-style-type: none"> <li>Recognize the organization and use of special sections in the library (e.g., reference, reserve books, paperbacks).</li> <li>Use the categorization of materials in Dewey areas up to the first decimal point to locate appropriate materials.</li> <li>Evaluate sources based on criteria such as copyright date, authority of author or publisher, comprehensiveness, readability, and alignment with research needs.</li> <li>Select a variety of credible sources in different formats relevant to research needs.</li> </ul>
<b>Indicator 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.</b>
<ul style="list-style-type: none"> <li>Evaluate and select information based on usefulness, currency, accuracy, authority, and point of view.</li> </ul>
<b>Indicator 1.1.6: Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.</b>
<ul style="list-style-type: none"> <li>Evaluate, paraphrase, and summarize information.</li> <li>Use both facts and opinions responsibly by identifying and verifying them.</li> </ul>
<b>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</b>
<ul style="list-style-type: none"> <li>Seek a balanced point of view by using diverse sources.</li> <li>Recognize the effect of different perspectives (points of view) on the information.</li> </ul>
<b>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing inquiry.</b>
<ul style="list-style-type: none"> <li>Incorporate technology resources such as online encyclopedias, online databases, and Web subject directories, to locate information.</li> <li>Implement key word search strategies.</li> <li>Select and use grade-level appropriate electronic reference materials and teacher-selected Internet sites to answer questions.</li> <li>Use a variety of search engines to do advanced searching.</li> </ul>



<b>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</b>
--

- |  |
|--|
| <ul style="list-style-type: none"><li>• Work together in self-managed teams to understand concepts and to solve problems.</li><li>• Offer information and opinion at appropriate times in group discussions.</li><li>• Encourage team members to share ideas and opinions.</li></ul> |
|--|

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

**Strand 2.1: Skills**

**Indicator 2.1.1: Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.**

- Compare and contrast information found in different sources.
- Assess the importance of ideas by comparing their treatment across texts.
- Identify main ideas and find supporting examples, definitions, and details.
- Analyze different points of view discovered in different sources.
- Determine patterns and discrepancies by comparing and combining information available in different sources.
- Interpret information and ideas by defining, classifying, and inferring from information in text.

**Indicator 2.1.2: Organize knowledge so that it is useful.**

- Combine and categorize information by using an outline or semantic web to find connections among ideas.
- Use common organizational patterns to organize information (chronological order, cause and effect, compare/contrast) in order to draw conclusions.

**Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.**

- Review ideas held at beginning of inquiry and reflections captured during note-taking.
- Reflect on how ideas changed with more information.
- Compare information found to tentative thesis or hypothesis; revisit or revise hypothesis as appropriate.
- Draw conclusions based on explicit and implied information.
- Form opinions and judgments backed up by supporting evidence.

**Indicator 2.1.4: Use technology and other information tools to analyze and organize information.**

- Identify and apply common productivity software and features such as menus and toolbars to plan, create, and edit word processing documents, spreadsheets, and presentations.
- Use interactive Web 2.0 tools to participate as a group in analyzing and organizing information.

**Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.**

- Participate in problem solving process with group.
- Work collaboratively to use technology for research to meet information needs.
- Work in groups to create and evaluate products that communicate information and ideas.
- Work in groups to import and manipulate pictures, images, and charts in word-processing documents, spreadsheets, presentations, Web pages, blogs, and other creative works, paying attention to copyright provisions.

**Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.**

- Use pre-writing to discover alternate ways to present conclusions.
- Decide presentation form based on audience and purpose.
- Use information to create original and creative products.
- Draft the presentation/product following a semantic web or outline and add supporting details from notes.
- Communicate both main and supporting points in the product.
- Follow and build on revision strategies suggested by teacher or librarian.
- Edit for grammar and language conventions.
- Cite all sources used.
- Assess own product and develop a few ideas for improvement.

## **Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

### **Strand 3.1: Skills**

#### **Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.**

- Present conclusions and supporting facts in a variety of ways.
- Present solutions to problems using modeled examples.
- Use maps, drawings, illustrations, graphs, and charts to communicate meaning.
- Identify, with guidance, skills that require practice and refinement.
- Modify and revise own work based on feedback from others.
- Follow plan of work but seek ideas for improving the process.
- Reflect at the end of an inquiry process to identify additional areas of personal interest for pursuit in the future.

#### **Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.**

- Offer information and opinions at appropriate times in group discussions.
- Encourage team members to share ideas and opinions.
- Ask questions of others in a group to elicit their information and opinions.
- Describe or summarize ideas of others accurately.
- Practice responsible and ethical use of information resources, both in own library and in other institutions.
- Share reading experiences and favorite literature to build a relationship with others.
- Use interactive tools (e.g., e-mail, discussion groups, listservs, blogs, wikis, portals) to exchange data collected and to learn curricular concepts by communicating with peers, experts, and other audiences.
- Participate in discussions on fiction and nonfiction related to curriculum.
- Collaborate with others to design a product or solve a problem.
- Share research and creative products with others.

#### **Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.**

- Present conclusions so that main ideas are clearly stated and supported by evidence.
- Use relevant ideas and details to show insight into people, events, new knowledge, and personal background.
- Use dramatic, audio, and video presentation as appropriate for subject and audience.
- Adjust pacing, volume, and intonation appropriate to content and purpose.

#### **Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.**

- Use appropriate media and formats to design and develop products that clearly and coherently display new understanding.

#### **Indicator 3.1.5: Connect learning to community issues.**

- Use real-world examples to establish authenticity.
- Identify and address community and global issues.
- Understand the concept of balanced points of view and seek information from diverse sources to get balanced view.
- Find information on both sides of a question.
- Respect the principles of intellectual freedom.
- Articulate the importance of intellectual freedom to a democratic society.

#### **Indicator 3.1.6: Use information and technology ethically and responsibly.**

- Respect ideas of others.
- Express opinions in an appropriate manner; respect ideas of others.
- Avoid plagiarism by rephrasing information in own words.
- Document quotations and cite sources using correct bibliographic format.
- Observe Internet safety procedures including safeguarding personal information.
- Respect privacy of others (e-mail, files, passwords, book checkout, Web sites visited).

- Follow school guidelines related to use of technology.
- Abide by Acceptable Use Policy by accessing only appropriate information.
- Use programs and Internet sites responsibly and ethically.
- Understand concept and role freedom of information plays in democracy.

<b>Standard 4: Pursue personal and aesthetic growth.</b>
<b>Strand 4.1: Skills</b>
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>
<ul style="list-style-type: none"> <li>• Share reading, listening, and viewing experiences in a variety of ways and formats.</li> <li>• Participate in discussions and book clubs.</li> <li>• Independently locate and select information for personal, hobby, or vocational interests.</li> <li>• Recognize library and information sources as having value beyond the need for school assignments.</li> <li>• Read books in a wide variety of genres.</li> <li>• Read, listen, and view independently.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to skim for facts.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>
<ul style="list-style-type: none"> <li>• Read books that connect to own experiences.</li> <li>• Read with purpose to investigate new ideas beyond the required curriculum.</li> <li>• Read books from various genres.</li> <li>• Compare and contrast story elements in two literary works.</li> <li>• Demonstrate understanding that texts, both narrative and expository, are written by authors expressing their own ideas.</li> <li>• Recognize the author's point of view; consider alternative perspectives.</li> </ul>
<b>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</b>
<ul style="list-style-type: none"> <li>• Respond to the images and feelings evoked by a literary or artistic work.</li> <li>• Connect text to personal experiences.</li> <li>• Use illustrations, context, graphics, and layout to extract meaning from different formats.</li> <li>• Interpret literary elements (plot, setting, characters, time) from evidence presented in the text.</li> <li>• Draw conclusions about the theme from evidence in the text.</li> <li>• Recognize how characters change.</li> </ul>
<b>Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.</b>
<ul style="list-style-type: none"> <li>• Read a variety of genres, including short stories, novels, poems, plays, drama, myths, films, and electronic magazines and books.</li> <li>• Describe the characteristics of different genres.</li> <li>• Explore new genres that fulfill interests and reading level (graphic novels, magazines, online magazines, e-books).</li> <li>• Select texts for classroom learning and for personal exploration.</li> <li>• Select texts on topics of interest at both a comfortable reading level and one that requires higher levels of comprehension skills.</li> <li>• Select print, non-print, and electronic materials based on personal interests and knowledge of authors.</li> <li>• Maintain a personal reading list.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>
<ul style="list-style-type: none"> <li>• Understand literal and implied meanings, and place new meanings in a conceptual framework.</li> <li>• Seek ideas in various types of resources to help interpret the world of home, school, and peers.</li> <li>• Track new and up-to-date ideas by reading online information, magazines, and other current sources. Check the ideas for accuracy by paying attention to the authority of the source and validating the ideas through multiple resources.</li> </ul>
<b>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</b>
<ul style="list-style-type: none"> <li>• Develop a visual picture of the main ideas and design a concept map, web, or graphic to capture the ideas.</li> <li>• Identify own learning style and organize ideas accordingly (e.g., linear, graphic).</li> <li>• Use two-column approach to note-taking to capture personal connections to information.</li> </ul>

<b>Indicator 4.1.7: Use social networks and information tools to gather and share information.</b>
<ul style="list-style-type: none"> <li>• Use information and communication technology tools and resources to collect, organize, and evaluate information relevant to issues or interests.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> <li>• Apply technology productivity tools to meet personal needs.</li> <li>• Participate in social networks responsibly and safely.</li> <li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>
<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>
<ul style="list-style-type: none"> <li>• Create original products based on responses to literature.</li> <li>• Experiment with various types of multimedia software for artistic and personal expression.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers museums).</li> </ul>

## Action Example: Grade 6

**GRADE: 6**

**LIBRARY CONTEXT:**

- ☐ Fixed    ☒ Flexible    ☐ Combination    ☐ Individualized Instruction
- ☐ Stand-alone lesson    ☐ Lesson in a unit    ☒ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None    ☐ Limited    ☐ Moderate    ☒ Intensive

**CONTENT TOPIC:** Obtaining and using natural resources and environmental impact.

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard 3:** Share knowledge and participate ethically and productively as members of our democratic society.

**Skills Indicator(s):**

**3.1.5** Connect learning to community issues.

**Benchmark(s):**

- Use real-world examples to establish authenticity.
- Identify and address community and global issues.
- Understand the concept of balanced points of view and seek information from diverse sources to get a balanced view.

**Dispositions Indicator(s):**

**2.2.4** Demonstrate personal productivity by completing products to express learning.

**Responsibilities Indicator(s):**

**2.3.1** Connect understanding to the real world.

**Self-Assessment Strategies Indicator(s):**

**4.4.5** Develop personal criteria for gauging how effectively own ideas are expressed.

**SCENARIO:**

*As part of the planning process for an upcoming sixth grade science unit on Sustainability the content leader for science makes an appointment with the school library media specialist (SLMS.) The content leader wants the students to engage in a research activity that will help them to work with the content of the unit and connect to global issues. Together the content leader and the SLMS plan a series of lessons in which the students will research the impact of the attainment and use of energy sources on the environment. Students will spend two periods doing research. The team decides that the students will participate in a mock panel discussion on the topic of alternative energy sources. Together they create a rubric for the student research process and panel discussion. The science teacher will introduce the students to an overview of alternative energy sources before the visit to the library. Students will be divided into teams of*

*two. The SLMS will guide students in the research process, note taking, citations and the selection of resources.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 6 Science: The student can explain how methods for obtaining and using resources such as water, minerals, and fossil fuel have consequences on the environment.

#### **OVERVIEW:**

As part of a science unit on conservation, sixth grade students will research alternative energy sources and communicate their knowledge by participating in a panel discussion on mock alternative energy solutions. An essential question framing their inquiry is: Which alternative energy sources will sustain a healthier and cleaner environment?

#### **FINAL PRODUCT:**

Students compose prepared remarks and deliver oral presentations for panel discussions. All work must be properly cited.

#### **LIBRARY LESSON(S):**

Students will find and balance diverse points of view while researching a topic.

#### **ESTIMATED LESSON TIME:**

Three 50-minute library periods

#### **ASSESSMENT**

##### **• Product**

- Teachers, the SLMS, and students use an instructor-designed rubric to assess the panel presentation on the basis of (1) content accuracy, (2) organization of ideas and details, and (3) communication skills

##### **• Process**

- Teachers and the SLMS gauge student performance by using a rubric to assess students' progress in (1) generating and answering questions, (2) determining accuracy, credibility, and relevance of information (3) gathering information from appropriate sources, (4) taking notes in own words, and (5) synthesizing notes for the presentation.

##### **• Student self-assessment**

- What are the sources that might be used?
- How do I locate these sources?
- Have I located sources with diverse perspectives?
- How well did my inquiry process go?

#### **INSTRUCTIONAL PLAN**

##### **• Resources students will use:**

- ☒Online subscription database(s)   ☒Web sites   ☒Books   ☒Reference
- ☒Nonprint   ☒Periodicals/newspapers



☐ Other (list):

- **Instruction/activities**

- **Direct instruction:** The SLMS shares the book, *The True Story of the Three Little Pigs*, by A. Wolf, and facilitates a discussion in which the students identify the point of view of the pigs and the wolf.
- **Modeling and guided practice:** The SLMS activates prior knowledge by asking the students to generate lists of energy sources. Students expand the list by brainstorming possible points of view in regard to each energy source. They choose one alternative energy source about which they will research and present their findings. The SLMS demonstrates several information sources that represent diverse points of view on the topic and works with the students to identify search strategies appropriate for finding experts and sources.
- **Independent practice:** Students gather information from a variety of sources and sort information to represent their selected energy source.
- **Sharing and reflecting:** Students participate in the mock panel discussion and complete a research process self evaluation.

## Action Example: Grade 7

**GRADE:** 7

**LIBRARY CONTEXT:**

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Fixed              | <input checked="" type="checkbox"/> Flexible | <input type="checkbox"/> Combination                           | <input type="checkbox"/> Individualized Instruction |
| <input type="checkbox"/> Stand-alone lesson | <input type="checkbox"/> Lesson in a unit    | <input checked="" type="checkbox"/> Multiple lessons in a unit |   |

**COLLABORATION CONTINUUM:**

- |                               |                                  |                                   |   |
|-------------------------------|----------------------------------|-----------------------------------|---|
| <input type="checkbox"/> None | <input type="checkbox"/> Limited | <input type="checkbox"/> Moderate | <input checked="" type="checkbox"/> Intensive |
|-------------------------------|----------------------------------|-----------------------------------|---|

**CONTENT TOPIC:** Community history

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 1** Inquire, think critically, and gain knowledge.

**Skills Indicator(s):**

**1.1.4** Find, evaluate, and select appropriate sources to answer questions.

**1.1.5** Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.

**Benchmarks**

- Select a variety of credible sources in different formats relevant to research needs.
- Evaluate and select information based on usefulness, currency, accuracy, authority, and point of view.

**Dispositions Indicator(s)**

**1.2.1** Display initiative and engagement by posing questions and investigating answers beyond the collection of superficial facts.

**1.2.4** Maintain a critical stance by questioning the validity and accuracy of all information.

**Responsibilities Indicator(s):**

**1.3.3** Follow ethical and legal guidelines in gathering and using information.

**Self-Assessment Strategies Indicator(s):**

**1.4.1** Monitor own information-seeking processes for effectiveness and progress, and adapt as necessary.

**1.4.2** Monitor gathered information, and assess for gaps or weaknesses.

**SCENARIO:**

*Seventh grade students in social studies focus on the history of their state as part of the grade level curriculum. The social studies teachers decide that one way to pique students' curiosity about the state's past would be to start with their own community. They approach the school library media specialist (SLMS) with the concept of research on local history. She sparks excitement when she immediately agrees to involve the neighborhood public librarian and the regional archivist in this project. As a planning team, the teachers and SLMS decide that*

*students might not only examine print, Nonprint, and digital resources, but that this would be a great opportunity to teach students the techniques of the interview. Toward this end, the SLMS also identifies potential human resources in the community, who can provide first-hand information about changes that have occurred in the community. This particular project extends over two months.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 7 Social Studies: The student can analyze both change and continuity and cause and/or effect in history.
- Content Standards for Grade 7 Language Arts: The student can use a variety of grade-appropriate sources to research an inquiry question.
- Content Standards for Grade 7 Technology: The student can demonstrate creative thinking and construct knowledge using technology.

#### **OVERVIEW:**

Seventh grade students conduct a community history investigation that centers on the essential questions: How has our community changed over time? What caused or influenced these changes? How can we find out?

#### **FINAL PRODUCT:**

Students work in pairs to compose multimedia presentations that synthesize the information they have gleaned from readings, viewings, and interviews. The presentations are added to an online archive of student produced materials on local history that the SLMS creates for the school.

#### **LIBRARY LESSON(S):**

Students work with the SLMS in a series of six sessions focusing on various aspects of information gathering including how to retrieve information from archival photographs, how to take notes from primary documents, how to conduct and analyze interviews, and how to properly cite these various resources.

#### **ESTIMATED LESSON TIME:**

Six sessions, 45 to 60 minutes each.

#### **ASSESSMENT**

##### **• Product**

- Teachers, the SLMS, and students use a rubric created by the instructional team to critique the multimedia presentations that are the final product. The rubric includes criteria on content accuracy, organization, visual layout, and cited authority.

##### **• Process**

- Students maintain a running reflection log on their progress throughout the project. Some of the questions framing their entries are listed below under self-questioning.

##### **• Student self-questioning**

- What background information would help me get an overview of my topic so that I can ask good questions and learn more about it?
- What intriguing questions do I have about this topic?
- What is my plan for research?
- What are all the sources that might be used?
- How do I evaluate the information that I find?
- Have I found enough accurate information to answer all my questions?
- What new understandings did I develop about the topic?

## INSTRUCTIONAL PLAN

- **Resources students will use:**

- ☐ Online subscription database(s)    ☒ Web sites    ☒ Books    ☒ Reference
- ☒ Nonprint    ☒ Periodicals/newspapers
- ☒ Other (list): Primary documents, interviews

- **Instruction/activities**

Note: These particular sessions focus on conducting an interview and how to assess an interview.

- **Direct instruction:** Introduce the interview as an important source of primary information for this particular research project. Go over an SLMS-designed checklist of the steps involved in pre-interview, interview, and post-interview. The steps might include the following: stating goals, gathering sufficient background information on topic, setting up the interview, preparing and sequencing the questions, rehearsing, and practicing appropriate interview etiquette.
- **Modeling and guided practice:** Have the SLMS and teacher model a mock interview being conducted. Invite the students to use the portion of the checklist that focuses on how to conduct an interview as they observe the SLMS and teacher perform. Critique the interview together.
- **Independent practice:** This portion must be done by the students in the actual interviews. The SLMS assists with scheduling since the interviewees are invited to the school library where the interviews are conducted.
- **Sharing and reflecting:** In a session after the actual interviews have been conducted, have students focus on an assessment of the interviews. Questions might focus on completeness of information gleaned, possible conflicts between the interviewee's comments and information gathered from other sources, and strategies to resolve any conflicts and/or fill gaps in information.

## Action Example: Grade 8

**GRADE: 8**

**LIBRARY CONTEXT:**

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Fixed              | <input type="checkbox"/> Flexible         | <input checked="" type="checkbox"/> Combination                | <input type="checkbox"/> Individualized Instruction |
| <input type="checkbox"/> Stand-alone lesson | <input type="checkbox"/> Lesson in a unit | <input checked="" type="checkbox"/> Multiple lessons in a unit |   |

**COLLABORATION CONTINUUM:**

- |                               |                                  |  |                                    |
|-------------------------------|----------------------------------|--|------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Limited | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Intensive |
|-------------------------------|----------------------------------|--|------------------------------------|

**CONTENT TOPIC:** Global warming

***STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS***

**Standard 3:** Share knowledge and participate ethically and productively as members of our democratic society.

**Skills Indicator(s):**

**3.1.4** Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use and assess.

**3.1.6** Use information and technology ethically and responsibly.

**Benchmark(s):**

- Respect ideas of others.
- Express opinions in an appropriate manner; respect ideas of others.
- Avoid plagiarism by rephrasing information in own words.
- Document quotations and cite sources using correct bibliographic format.
- Observe Internet safety procedures including safeguarding personal information.
- Respect privacy of others (e-mail, files, passwords, book checkout, Web sites visited).
- Follow school guidelines related to use of technology.
- Abide by Acceptable Use Policy by accessing only appropriate information.
- Use programs and Internet sites responsibly and ethically.
- Understand concept and role freedom of information plays in democracy.

**Dispositions Indicator(s):**

**2.2.4** Demonstrate personal productivity by completing products to express learning.

**3.2.1** Demonstrate leadership and confidence by presenting ideas to others in both formal and informal situations.

**Responsibilities Indicator(s):**

**3.3.5** Contribute to the exchange of ideas within and beyond the learning community.

**3.3.7** Respect the principles of intellectual freedom.

**Self-Assessment Strategies Indicator(s):**

**1.4.1** Monitor own information-seeking processes for effectiveness and progress, and adapt as necessary.

### 3.4.2 Assess the quality and effectiveness of the learning product.

#### **SCENARIO:**

*Eighth grade students are working on individual investigations of a topic related to global warming in an integrated Science/Math/Language Arts unit. Students are required to create an electronic portfolio that illustrates key information related to their topic. Students will present their portfolios at the end of the school year at an evening open house in the library media center for parents, faculty and community members. Several students will be presenting simultaneously with opportunities for the audience to ask questions of each student. The eighth grade teaching team has asked the School Library Media Specialist (SLMS) to assist the Language Arts teacher in teaching the students how to create an annotated works cited list using an online citation generator. The SLMS has team taught lessons on intellectual property and information processing with the Language Arts teacher during the course of the project. The SLMS has also worked with individual students to identify essential citation information for the various resources they have collected. Because the students will present their portfolios in the library, each student will have a rehearsal in the library with the SLMS and the eighth grade teaching team before the open house.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 8 Information Literacy: The student can locate sources, use information, and present findings.
- Content Standards for Grade 8 Math: The student can demonstrate understanding of an ability to use data analysis, probability, and statistics.
- Content Standards for Grade 8 Science: The student can demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space.
- Content Standards for Grade 8 Technology: The student can apply digital tools and skills with creativity and innovation to express him/herself, construct knowledge and develop products and processes.

#### **OVERVIEW:**

Eighth grade students will synthesize learning in Science, Mathematics and Language Arts to present accurate, relevant, authoritative and current information about global warming using digital tools and information processing strategies. The essential questions are: Has the climate of our world changed in the last fifty years because of human activity? How can you justify your response?

#### **FINAL PRODUCT:**

The student develops a portfolio that will contain: photographs/illustrations; graphs/charts, vocabulary list; a student-generated podcast; and an annotated works cited list of current resources.

#### **LIBRARY LESSON(S):**

Students will learn: how to identify project-appropriate resources; how to effectively use a range of resources; how to define and identify intellectual property; and how to ethically credit the owners of intellectual property.

#### **ESTIMATED LESSON TIME:**

Three to five 50-minute lessons in the library, with individual follow up as students finalize projects.

#### **ASSESSMENT**

##### **• Product**

- The eighth grade team, SLMS and students use an instructor-designed rubric for each required portion of the portfolio and presentation. General criteria used for the portfolio include: statements of objectives; samples of products/performance aligned with the objectives; and, evaluations and student reflections on the quality of work. The annotated works cited list will conform to MLA formatting and include all elements of an annotation as taught.

##### **• Process**

- Students will maintain a self-assessment journal throughout their work on this project outlined by the Self-Questioning items below.

##### **• Student self-questioning**

- Have I completed each required portion of this assignment to the best of my ability?
- Have I followed the rules for accessing information and technology?
- Have I credited each source of information in the correct format?
- Have I adequately described each source in the annotated works cited list?
- Have I adequately answered the essential questions for this project?

#### **INSTRUCTIONAL PLAN**

##### **• Resources students will use:**

- ☒ Online subscription database(s)   ☒ Web sites   ☒ Books   ☒ Reference
- ☒ Nonprint   ☒ Periodicals/newspapers
- ☒ Other (list): photos, video clips

##### **• Instruction/activities**

- **Direct Instruction:** The SLMS will instruct the students on MLA rules for citing sources and provide example "formulas" in a mini style sheet for students to generate works cited entries with their own project resources. The SLMS will give instructions on how to access the online citation generator (usernames/passwords, URL, etc.). The SLMS will define an annotated works cited list and provide examples of annotations. The model annotations will include: a brief statement about the format and topic; the author/creator's credentials; three significant facts learned from the source; and a statement about why the source was chosen.
- **Modeling and guided practice:** The SLMS will use student project resources to create 2 or 3 sample MLA citations with the class. The SLMS will demonstrate data entry for several format examples and guide students through one or two examples generated from the class. After writing a model annotation with the

whole class, the SLMS will guide individual students in writing a concise and clear annotation for a variety of formats during the remainder of the lesson.

- **Independent practice:** Students will independently complete MLA citations for each project resource using the mini style sheet. They will complete a generic form to transfer citation information from source cards before entering information into an online citation generator. Annotations for each of their sources that include: a brief statement about the format and topic; the author/creator's credentials; three significant facts learned from the source; and a statement about why the source was chosen.
- **Sharing and reflecting:** After the final presentation, students will use a "3,2,1" model to talk about the project and their learning process: list 3 things learned; list 2 things to do differently for the next project; write 1 burning question that was left unanswered. The students' work will be shared and preserved by including the portfolios in the library collection.



## 6d. Benchmarks to Achieve by Grade 10

<b>Standard 1: Inquire, think critically, and gain knowledge</b>
<b>Strand 1.1: Skills</b>
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>
<ul style="list-style-type: none"> <li>Use an inquiry-based process for deepening content knowledge, connecting academic learning with the real world, pursuing personal interests, and investigating opportunities for personal growth.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>
<ul style="list-style-type: none"> <li>Read background information to discover the key components of the problem or question.</li> <li>Identify key words or synonyms, both stated and implied, to use them in further research.</li> <li>Develop a schema or mind map to express the big idea and the relationships among supporting ideas and topics of interest.</li> <li>Develop and refine the topic, problem, or question independently to arrive at a worthy and manageable topic.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>
<ul style="list-style-type: none"> <li>Focus the purpose of the research by formulating specific questions to be answered.</li> <li>Refine questions to provide a framework for the inquiry and to fulfill the purpose of the research.</li> <li>Analyze what is already known or what is observed or experienced to form tentative thesis or hypothesis to predict answers to inquiry questions.</li> <li>Plan inquiry to test hypothesis systematically or to validate thesis.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>
<ul style="list-style-type: none"> <li>Consider and prioritize possible sources of information based on specific information needs and strengths of different information formats.</li> <li>Use specialized reference materials to find specific and in-depth information.</li> <li>Use both primary and secondary sources.</li> <li>Evaluate sources based on criteria such as copyright date, authority of author or publisher, depth of coverage, and relevance to research questions.</li> </ul>
<b>Indicator 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.</b>
<ul style="list-style-type: none"> <li>Evaluate and select information based on authority, accuracy, point of view, and reliability.</li> <li>Evaluate historical information for validity of interpretation, and scientific information for accuracy and reliability of data.</li> <li>Determine the extent of the research by the complexity of the subject, not by time or page limits.</li> </ul>
<b>Indicator 1.1.6: Read, view and listen for information presented in any format (e.g. textual, visual, media, digital) in order to make inferences and gather meaning.</b>
<ul style="list-style-type: none"> <li>Take notes using one or more note-taking strategies, including reflecting on the information (e.g., graphic organizers, two-column notes).</li> <li>Categorize information; add new categories as necessary.</li> <li>Interpret information.</li> </ul>
<b>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</b>
<ul style="list-style-type: none"> <li>Recognize degrees of bias and the effect on the information presented.</li> <li>Counter the effect of bias on the accuracy and reliability of information by actively pursuing a balanced perspective.</li> </ul>
<b>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing inquiry.</b>
<ul style="list-style-type: none"> <li>Use a range of electronic resources efficiently, effectively, and safely by applying a variety of search and evaluation strategies.</li> <li>Use social tools to demonstrate and share learning.</li> </ul>
<b>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</b>

- Seek ideas and opinions from others.
- Respect and help groups find and incorporate diverse ideas.
- Describe ideas of others accurately.
- Help to organize and integrate contributions of all group members in to products.

## **Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.**

### **Strand 2.1: Skills**

**Indicator 2.1.1: Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.**

- Identify main, supporting, and conflicting information using multiple sources to support interpretation or point of view.
- Make and explain inferences about main ideas.
- Critically examine and analyze relevant information from a variety of sources to discover relationships and patterns among ideas.
- If discrepancy in points of view is discovered, continue research until it is resolved.

**Indicator 2.1.2: Organize knowledge so that it is useful.**

- Use different organizational patterns as appropriate for point of view and conclusions (cause and effect, hierarchy, chronology, compare/contrast).
- Experiment with devising own organizational structure.

**Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.**

- Identify when information does not support tentative thesis or hypothesis; gather additional information or revise thesis/hypothesis.
- Draw clear and appropriate conclusions supported by evidence and examples.
- Combine ideas and information to develop and demonstrate new understanding.
- Recognize multiple causations for same issues or events.
- Apply strategies for making personal and real world connections with information.

**Indicator 2.1.4: Use technology and other information tools to analyze and organize information.**

- Use technology tools (including Web 2.0 tools) to create the most appropriate organizational pattern to express connections and patterns.
- Identify and apply common productivity software (e.g., use features such as spellchecker and thesaurus to ensure accuracy of word-processing documents; use formulas and create charts in spreadsheets; and insert pictures, movies, sound and charts in presentation software) to enhance communication to an audience, promote productivity and support creativity).

**Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.**

- Participate in discussion to analyze information problems and to suggest solutions.
- Work with others to select, organize, and integrate information and ideas from a variety of sources and formats.
- Use online environments or other collaborative tools to facilitate design and development of materials, models, publications, and presentations.
- Apply utilities to edit pictures, images, and charts; complying with all copyright provisions.

**Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.**

- Use pre-writing to discover most effective way to present conclusions.
- Decide presentation form based on effective communication of point of view or purpose.
- Draft the presentation/product to present argument, point of view, interpretation, or new model most effectively with supporting evidence.
- Create maps, charts, tables, diagrams, graphs, and other formats to present ideas and information.
- Expand formats to include multimedia, e-mail, software, podcasts, blogs, wikis, Web pages, spreadsheets and databases.
- Revise based on self-assessment, teacher feedback, and peer feedback.
- Edit for grammar, language conventions, and style
- Cite all sources used according to style formats.
- "Publish" final product.

- Evaluate the product and process throughout the work and make revisions when necessary.
- Express own ideas through creative products in a variety of formats.

## **Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

### **Strand 3.1: Skills**

#### **Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.**

- Present conclusions to answer the question or problem.
- Set high and clear standards for work and develop criteria for self-assessment or use established criteria (rubrics, checklists).
- Assess own work and establish own revision strategies.
- Follow own research plan and evaluate effectiveness of inquiry process.
- Reflect at the end of an inquiry process to identify additional areas of personal interest for pursuit in the future.

#### **Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.**

- Seek ideas and opinions from others.
- Respect and help groups find and incorporate diverse ideas.
- Describe or summarize ideas of others accurately and respond appropriately.
- Seek alternative sources of information and respect the guidelines for access in all environments (public libraries, museums, cultural institutions, agencies).
- Recognize that equitable access to information depends on student responsibility.
- Share reading experiences and favorite literature to build a relationship with others.
- Use interactive tools/Web sites to collaborate, publish, and interact with peers, experts, and other audiences.
- Participate in discussions on fiction and nonfiction related to curriculum.
- Collaborate with others to design a product or solve a problem.
- Share research and creative products with others.

#### **Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.**

- Use an organizational structure that effectively connects ideas and creates the desired intent.
- Use the most appropriate format, tone and language to communicate ideas and point of view clearly to different audiences.

#### **Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.**

- Use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

#### **Indicator 3.1.5: Connect learning to community issues.**

- Use multiple resources to seek balanced perspectives.
- Find authentic connections of inquiry topic to real world.
- Demonstrate understanding of intellectual freedom and First Amendment rights.

#### **Indicator 3.1.6: Use information and technology ethically and responsibly.**

- Express opinions in an appropriate manner; respect ideas of others.
- Understand what constitutes plagiarism and refrain from representing work attributable to others as their own.
- Give credit for all quotes, citing them properly in notes and bibliography.
- Discuss issues related to acceptable and responsible use of information and communication technology (e.g., privacy, security, copyright, file sharing, plagiarism).
- Respect privacy of others (e-mail, files, passwords, book checkout, Web sites visited).
- Legally obtain, store, and disseminate text, data, images, or sounds.
- Abide by the Acceptable Use Policy in all respects and use Internet responsibly and safely.
- Explain First Amendment rights and the process available to defend them.
- Understand concept and role freedom of information plays in democracy.
- Demonstrate understanding of intellectual freedom and intellectual property rights by respecting and

observing guidelines for using information sources.

- Promote and defend the rights of others.
- Either put all information in own words or select short segments to quote.
- Extend respect for intellectual property rights and copyright by giving credit for ideas as well as directly quoted material.
- Demonstrate awareness and understanding of fair use guidelines for educational purposes.
- Make copies or downloads of print, software, or audio only when permission from author/publisher has been obtained or purchase has been made.
- Follow school guidelines related to use of technology.
- Observe Internet safety procedures including safeguarding personal information.

<b>Standard 4: Pursue personal and aesthetic growth.</b>
<b>Strand 4.1: Skills</b>
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>
<ul style="list-style-type: none"> <li>• Share reading, viewing, and listening experiences in variety of ways and formats, including book clubs and interest groups.</li> <li>• Seek and locate information about personal interests and usually find it independently, using the same criteria and strategies used for academic information seeking.</li> <li>• Read, listen, and view in a variety of formats (e.g., print and electronic books, other media).</li> <li>• Read, listen, and view to explore new ideas beyond the required curriculum.</li> <li>• Read, listen, and view for pleasure, to learn, to solve problems, and to explore many different ideas.</li> <li>• Read, listen, and view for a variety of purposes: to live the experiences of a character, to answer questions, to find out about something new, to find facts about subjects of interest, to form opinions.</li> <li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>
<ul style="list-style-type: none"> <li>• Recognize and evaluate the author's point of view and how it affects the text; consider and evaluate alternative perspectives.</li> <li>• Read books that connect to real-world issues.</li> <li>• Recognize similarities and differences among authors writing on the same theme.</li> <li>• Recognize how own point of view influences perspective on text.</li> </ul>
<b>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</b>
<ul style="list-style-type: none"> <li>• Assess the emotional impact of specific works on the reader or viewer.</li> <li>• Apply ideas gained from responding to literary and artistic works to own life.</li> <li>• Evaluate the effectiveness of a literary work in terms of the author's use and interweaving of literary elements.</li> <li>• Compare the theme and its treatment in different works of literature.</li> </ul>
<b>Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.</b>
<ul style="list-style-type: none"> <li>• Select texts for academic, personal, and real-world purposes.</li> <li>• Select print, non-print, and digital materials based on personal interests and knowledge of authors.</li> <li>• Select texts on topics of interest at both a comfortable reading level and one that requires higher levels of comprehension skills.</li> <li>• Read a variety of fiction and nonfiction materials.</li> <li>• Read/listen to works of international and multicultural authors.</li> <li>• Use print, non-print, and electronic information resources for information about personal needs; actively seek answers to questions.</li> <li>• Set reading goals and maintain a personal reading list.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>
<ul style="list-style-type: none"> <li>• Understand text on both a literal and an abstract level.</li> <li>• Use context and graphic clues to aid understanding.</li> <li>• Consider alternative perspectives and evaluate differing points of view.</li> <li>• Compare new ideas to previous understandings and make changes to mental framework where appropriate.</li> </ul>
<b>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</b>
<ul style="list-style-type: none"> <li>• Use visualization to provide a clear picture of the ideas to be remembered.</li> <li>• Categorize new ideas with key words and tagging.</li> <li>• Develop own system of note-taking that incorporates personal reflections.</li> </ul>
<b>Indicator 4.1.7: Use social networks and information tools to gather and share information.</b>
<ul style="list-style-type: none"> <li>• Use information and communication technology tools and resources to collect, organize, and evaluate information relevant to a real-world issue or problem.</li> <li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li> </ul>

- |   |
|---|
| <ul style="list-style-type: none"><li>• Search other libraries for information related to personal interests.</li><li>• Apply technology productivity tools to meet personal needs.</li><li>• Participate in social networks responsibly and safely.</li><li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li><li>• Use online catalog strategies to locate information about personal interest topics in own and other libraries.</li></ul> |
|---|

<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>
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- |   |
|---|
| <ul style="list-style-type: none"><li>• Express own ideas through creative products in a variety of formats.</li><li>• Choose format appropriate for audience and purpose.</li><li>• Select and use various types of multimedia software for artistic and personal expression.</li><li>• Pursue creative expressions of information in the community (public library, arts centers, museums).</li></ul> |
|---|



## Action Example: Grade 9

**GRADE:** 9

**LIBRARY CONTEXT:**

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> Fixed                         | <input checked="" type="checkbox"/> Flexible | <input type="checkbox"/> Combination                | <input type="checkbox"/> Individualized Instruction |
| <input checked="" type="checkbox"/> Stand-alone lesson | <input type="checkbox"/> Lesson in a unit    | <input type="checkbox"/> Multiple lessons in a unit |   |

**COLLABORATION CONTINUUM:**

- |                               |   |                                   |                                    |
|-------------------------------|---|-----------------------------------|------------------------------------|
| <input type="checkbox"/> None | <input checked="" type="checkbox"/> Limited | <input type="checkbox"/> Moderate | <input type="checkbox"/> Intensive |
|-------------------------------|---|-----------------------------------|------------------------------------|

**CONTENT TOPIC:** Favorite author research paper

***STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS***

**Standard 4:** Pursue personal and aesthetic growth.

**Skills Indicator(s):**

**4.1.7** Use social networks and information tools to gather and share information.

**Benchmark(s):**

- Use information and communication technology tools and resources to collect, organize, and evaluate information relevant to a real-world issue or problem.
- Use online catalog strategies to locate information about personal interest topics in own and other libraries.
- Search other libraries for information related to personal interests.
- Apply technology productivity tools to meet personal needs.
- Participate in social networks responsibly and safely.
- Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).
- Use online catalog strategies to locate information about personal interest topics in own and other libraries.

**Dispositions Indicator(s):**

**4.2.1** Display curiosity by pursuing interests through multiple resources.

**4.2.2** Demonstrate motivation by seeking information to answer personal questions and interests, trying a variety of formats and genres, and displaying a willingness to go beyond academic requirements.

**Responsibilities Indicator(s):**

**4.3.1** Participate in the social exchange of ideas, both electronically and in person.

**4.3.4** Practice safe and ethical behaviors in personal electronic communication and interaction.

**Self-Assessment Strategies Indicator(s):**

**1.4.2** Use interaction with and feedback from teachers and peers to guide own inquiry process.

**1.4.4** Seek appropriate help when it is needed.

#### 4.4.1 Identify own areas of interest.

##### **SCENARIO:**

*A ninth grade student has recently completed a traditional research paper on her favorite author: Jane Austen. In a conversation with the school library media specialist (SLMS), the student indicates that she would like to create a blog that includes information she gathered for her research paper and helps her connect with other fans of the author. The student would like to e-mail a Jane Austen scholar to ask questions but is not sure about protocol for e-mailing an expert. Upon further conversation, the SLMS encourages the student to bring her research paper to the library to review the paper and works cited list. After reviewing the research paper and works cited list, the SLMS suggests that the student expand the resources used for the research paper to include a bibliography of Austen's novels and books written about the author's work, along with links to graphics, video and audio clips from Austen's novels. The SLMS also suggests that the student may want to create a wiki, rather than a blog, to better share information. The SLMS then meets with the ninth grade team and proposes that a wiki would be a great way to follow up and share what students learn from their research papers as an addition to the research unit and offers to teach wiki design as an additional element to the project.*

##### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standard for Grade 9 Language Arts: The student can use the writing process and conventions of language and research to construct meaning and communicate effectively for a variety of purposes and audiences using a range of forms
- Content Standard for Grade 9 Information Literacy/Library Media Standard: The student can locate sources, use information, and present findings.
- Content Standard for Grade 9 Information Literacy/Library Media Standard: The student can use information safely, ethically and legally.
- Content Standard for Grade 9 Information Literacy/Library Media Standard: The student can pursue personal interests through literature and other creative expressions.
- Content Standard for Grade 9 Technology Standard: The student can collaborate and communicate globally in a digital environment.
- Content Standard for Grade 9 Technology Standard: The student can apply digital tools and skills with creativity and innovation to express him/herself, construct knowledge and develop products and processes.

##### **OVERVIEW:**

The student wishes to share and expand upon information synthesized in an English I research assignment. In particular, the student wishes to exchange information with others interested in the same topic/author.

##### **FINAL PRODUCT:**

The student designs a wiki that includes a variety of resources and a component for exchanging information with visitors to the wiki.

##### **LIBRARY LESSON(S):**

The SLMS conducts informal, one-on-one instructional sessions and conferences with the student. These meetings focus on searches for additional resources, netiquette required for online exchanges and methods to build and sustain learning through social networks.

**ESTIMATED LESSON TIME:**

Multiple 15 to 30-minute sessions in the library.

**ASSESSMENT**

• **Product**

- The student and SLMS will create a self-assessment checklist to include criteria for (1) wiki design, (2) quality and variety of resources, (3) reliability and accuracy of information, and (4) appropriate credit for sources of information. The student and the SLMS will also use a SWOT (Strengths, Weakness, Opportunities and Threats) analysis to evaluate the wiki.

• **Process**

- The student will maintain a reflection log, outlined by the Student Self-assessment questions, throughout her independent research to share with the SLMS at their meetings.

• **Student self-questioning**

- Did I effectively expand the information beyond my original report?
- Did I gather good information from experts?
- Did I find some new pictures, audio or video to add to the original research?
- Did I achieve my goal to share my information with others outside of my class and school?
- Did I achieve my goal of connecting with other people who share my interest in Jane Austen?

**INSTRUCTIONAL PLAN**

• **Resources students will use:**

- ☒ Online subscription database(s)   ☒ Web sites   ☒ Books   ☒ Reference
- ☒ Nonprint   ☒ Periodicals/newspapers
- ☒ Other (list): Audio recordings, DVD movies, or other video sources

• **Instruction/activities**

- **Direct Instruction:** The SLMS reviews the online and library collection resources presented during the English I research project and suggests additional resources. The SLMS also reviews Netiquette Rules for safely and responsibly using electronic resources and in communicating with e-mail or other online communication tools, and provides instruction on how to choose a wiki site and how to set up the basic account information and design.
- **Modeling and guided practice:** The SLMS works with the student to identify search strategies appropriate for finding experts and multimedia resources and assists the student in searching WorldCat® for scholarly works on Jane Austen. The SLMS challenges the student to develop new questions that will lead to discovery of new information and understandings about the author and her works and guides the student toward examples of well-designed wikis.

- **Independent practice:** The student uses independent time to search for resources and make contact with experts. She creates and implements a wiki design that includes appropriately credited content and links to multimedia resources.
- **Sharing and reflecting:** The student and SLMS review the self-assessment checklist. The student completes a SWOT analysis of the wiki to plan updates and maintenance of the site. The student's wiki is linked on the library web page.

## Action Example: Grade 10

**GRADE: 10**

**LIBRARY CONTEXT:**

- ☐ Fixed      ☒ Flexible      ☐ Combination      ☐ Individualized Instruction
- ☒ Stand-alone lesson      ☐ Lesson in a unit      ☐ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None      ☒ Limited      ☐ Moderate      ☐ Intensive

**CONTENT TOPIC:** Using InspireData™ software to compare data.

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 2** Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.

**Skills Indicator(s):**

**2.1.4** Use technology and other information tools to analyze and organize information.

**Benchmark(s):**

- Use technology tools (including Web 2.0 tools) to create the most appropriate organizational pattern to express connections and patterns.
- Identify and apply common productivity software (e.g., use features such as spellchecker and thesaurus to ensure accuracy of word-processing documents; use formulas and create charts in spreadsheets; and insert pictures, movies, sound and charts in presentation software) to enhance communication to an audience, promote productivity and support creativity.

**Dispositions Indicator(s):**

**2.2.3** Employ a critical stance in drawing conclusions by demonstrating that the pattern of evidence leads to a decision or conclusion.

**Responsibilities Indicator(s):**

**3.3.4** Create products that apply to authentic, real-world contexts.

**Self-Assessment Strategies Indicator(s):**

**1.4.3** Monitor gathered information and assess for gaps or weaknesses.

**SCENARIO:**

*The school library media specialist (SLMS) is approached by an algebra teacher who attended a professional development session where the SLMS demonstrated InspireData™, software that allows students to use a variety of charts and graphs to manipulate and analyze data. She wants the SLMS to teach her students how to use this software. The SLMS suggests that the lesson will be more effective if the students actually have data to input. They schedule the teacher's six classes in the library computer lab for a 50-minute lesson on InspireData™. The teacher decides that students will plan a trip to Chicago. As part of that planning, they must decide on*

*the best mode of transportation based on the cost of travel and the amount of time that particular mode takes. The students will use pre-determined websites to collect costs and times needed to travel by train, car, bus and plane. Once they have collected their data, they will receive instruction on the use of InspireData™. The SLMS will guide the students through the features of the software at which time they will input their data. They take their printed graphs with their data back to class for review, presentation and assessment.*

#### **CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

- Content Standards for Grade 10 Algebra: The student can use two or more types of graphs to compare data sets.

#### **OVERVIEW:**

Tenth grade students in algebra class examine and manipulate various types of graphs to determine the appropriateness of different graphs in relation to the data.

#### **FINAL PRODUCT:**

Students produce graphs comparing cost and time of various modes of transportation.

#### **LIBRARY LESSON(S):**

Students will learn to use the features of InspireData™ and explore the various types of graphs that can be made using the software. They will use data collected about the cost and time it takes to get from their hometown to Chicago using several modes of transportation. In the process they analyze how best to graph the data depending on the intended purpose.

#### **ESTIMATED LESSON TIME:**

One 50-minute session

#### **ASSESSMENT**

##### **• Product**

- Teacher, SLMS, and students use a teacher-developed rubric to assess the graphs based on the appropriate choice of graph in relation to information collected as well as conclusion based on analysis of data.

##### **• Process**

- Teacher and SLMS use the graphs generated by the students to determine whether students can use the software correctly.

##### **• Student self-questioning**

- Is my choice of the best mode of transportation supported by the evidence?
- Have I chosen the most appropriate graph to show my conclusion?

#### **INSTRUCTIONAL PLAN**

##### **• Resources students will use:**

- ☐ Online subscription database(s)   ☒ Web sites   ☐ Books   ☐ Reference
- ☐ Nonprint   ☐ Periodicals/newspapers
- ☒ Other (list): InspireData™ software

Web sites:

<http://studenttravel.about.com/od/getontheroad/qt/gasprices.htm>

<http://www.amtrak.com/servlet/ContentServer?pagename=Amtrak/HomePage>

<http://www.aa.com/aa/homePage.do>

[http://www.greyhound.com/home/?crcat=payperclick&crsource=google\\_ads&crkw=greyhound](http://www.greyhound.com/home/?crcat=payperclick&crsource=google_ads&crkw=greyhound)

- **Instruction/activities**

- **Direct instruction:** The SLMS introduces students to features of the InspireData™ software.
- **Modeling and guided practice:** Using data gathered by the SLMS from the same websites that the students will use, students input the data along with the SLMS. They try different manipulating graphs and decide as a class which one most effectively represents the data.
- **Independent practice:** Students input the data they collected, choose the graph that best compares their data and print their completed graph.
- **Sharing and reflecting:** These graphs and conclusions will be shared and critiqued in the classroom.

## 6e. Benchmarks to Achieve by Grade12

<b>Standard 1: Inquire, think critically, and gain knowledge.</b>
<b>Strand 1.1: Skills</b>
<b>Indicator 1.1.1: Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.</b>
<ul style="list-style-type: none"> <li>Independently and systematically use an inquiry-based process to deepen content knowledge, connect academic learning with the real world, pursue personal interests, and investigate opportunities for personal growth.</li> </ul>
<b>Indicator 1.1.2: Use prior and background knowledge as context for new learning.</b>
<ul style="list-style-type: none"> <li>Explore problems or questions for which there are multiple answers or no “best” answer.</li> <li>Explore general information sources to increase familiarity with the topic.</li> <li>Review the initial information need to develop, clarify, revise, or refine the question.</li> <li>Compare new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.</li> </ul>
<b>Indicator 1.1.3: Develop and refine a range of questions to frame the search for new understanding.</b>
<ul style="list-style-type: none"> <li>Recognize that the purpose of the inquiry determines the type of questions and the type of thinking required (e.g., an historical purpose may require one to take a position and defend it).</li> <li>Develop a thesis statement and formulate questions based on the information need.</li> <li>Review the initial information need to clarify, revise, or refine the questions.</li> </ul>
<b>Indicator 1.1.4: Find, evaluate, and select appropriate sources to answer questions.</b>
<ul style="list-style-type: none"> <li>Identify the value of and differences among potential resources in a variety of formats.</li> <li>Use various search systems to retrieve information in a variety of formats.</li> <li>Describe criteria used to make resource decisions and choices.</li> <li>Seek and use a variety of specialized resources available from libraries, the Internet, and the community.</li> </ul>
<b>Indicator 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.</b>
<ul style="list-style-type: none"> <li>Recognize that knowledge can be organized into disciplines that influence the way information is presented and use this understanding to effectively access information.</li> <li>Use consciously selected criteria to determine whether the information contradicts or verifies information from other sources.</li> <li>Recognize the social, cultural, or other context within which the information was created and explain the impact of context on interpreting the information.</li> </ul>
<b>Indicator 1.1.6: Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.</b>
<ul style="list-style-type: none"> <li>Restate text resource’s concepts in own words and select appropriate data accurately.</li> <li>Integrate new information with previous information or knowledge.</li> <li>Create a system to organize the information.</li> <li>Extend initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses or generalizations that may require additional information.</li> <li>Challenge ideas represented and make notes of questions to pursue in additional sources.</li> </ul>
<b>Indicator 1.1.7: Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.</b>
<ul style="list-style-type: none"> <li>Analyze the structure and logic of supporting arguments or methods.</li> <li>Analyze information for prejudice, deception, or manipulation.</li> <li>Investigate different viewpoints encountered and determine whether and how to incorporate or reject these viewpoints.</li> <li>Compensate for the effect of point of view and bias on all information available in the public domain by seeking alternative perspectives.</li> </ul>
<b>Indicator 1.1.8: Demonstrate mastery of technology tools for accessing information and pursuing</b>



<b>inquiry.</b>
<ul style="list-style-type: none"> <li>• Select the most appropriate technologies to access and retrieve the needed information.</li> <li>• Use various technologies to organize and manage the information selected.</li> <li>• Create own electronic learning spaces by collecting and organizing links to information resources, working collaboratively, and sharing new ideas and understandings with others.</li> </ul>
<b>Indicator 1.1.9: Collaborate with others to broaden and deepen understanding.</b>
<ul style="list-style-type: none"> <li>• Model social skills and character traits that advance a team's ability to identify issues and problems and work together on solutions and products.</li> <li>• Design and implement projects that include participation from diverse groups.</li> </ul>

<b>Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.</b>
<b>Strand 2.1: Skills</b>
<b>Indicator 2.1.1: Continue an inquiry-based research process by applying critical thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.</b>
<ul style="list-style-type: none"> <li>• Build a conceptual framework by synthesizing ideas gathered from multiple texts.</li> <li>• Resolve conflicting evidence or clarify reasons for differing interpretations of information and ideas.</li> </ul>
<b>Indicator 2.1.2: Organize knowledge so that it is useful.</b>
<ul style="list-style-type: none"> <li>• Organize information independently, deciding the structure based on the relationships among ideas and general patterns discovered.</li> </ul>
<b>Indicator 2.1.3: Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.</b>
<ul style="list-style-type: none"> <li>• Combine information and inferences to draw conclusions and create meaning.</li> <li>• Develop own point of view and support with evidence.</li> <li>• Present different perspectives with evidence for each.</li> <li>• Apply new knowledge to real-world issues and problems.</li> </ul>
<b>Indicator 2.1.4: Use technology and other information tools to analyze and organize information.</b>
<ul style="list-style-type: none"> <li>• Determine important connections among ideas by using common productivity software to categorize and analyze information.</li> <li>• Use presentation and production software available locally and through the interactive Web to enhance creativity in organizing and presenting information for better communication to others.</li> </ul>
<b>Indicator 2.1.5: Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.</b>
<ul style="list-style-type: none"> <li>• Collaborate locally and remotely with peers, experts, and others to collect, produce, and share information.</li> <li>• Work with others to find solutions to problem solving situations.</li> </ul>
<b>Indicator 2.1.6: Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.</b>
<ul style="list-style-type: none"> <li>• Use the most appropriate format, tone, and language to communicate ideas clearly to different audiences.</li> <li>• Create products for authentic reasons.</li> <li>• Keep track of all ideas used from other sources and cite ideas and direct quotes according to style formats.</li> <li>• Employ a variety of strategies for revising and reviewing own work.</li> </ul>

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.**

**Strand 3.1: Skills**

**Indicator 3.1.1: Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.**

- Present complex ideas with clarity and authority.
- Present original conclusions effectively.
- Identify own strengths, assess own inquiry process and product, and set goals for improvement.

**Indicator 3.1.2: Participate and collaborate as members of a social and intellectual network of learners.**

- Offer and defend information brought to group.
- Seek consensus from a group, when appropriate, to achieve a stronger product.
- Help to organize and integrate contributions of all group members into products.
- Use technology tools to collaborate, publish, and interact with peers, experts, and other real-world audiences.

**Indicator 3.1.3: Use writing and speaking skills to communicate new understandings effectively.**

- Employ organizational and presentation structures [e.g., narrative essays, poems, debates] using various formats to achieve purpose and clarify meaning.
- Give a presentation to support a position on a specified topic and respond to questions from the audience.
- Use language that shows authority and knowledge of topic.
- Present ideas and conclusions to audiences beyond the school.

**Indicator 3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.**

- Prepare and deliver a “professional” presentation to audience outside of school using technology as medium of presentation.

**Indicator 3.1.5: Connect learning to community issues.**

- Investigate multiple sides of issues and evaluate them carefully, particularly on controversial or culturally based topics.
- Connect learning to real-world issues.

**Indicator 3.1.6: Use information and technology ethically and responsibly.**

- Analyze the consequences and costs of unethical use of information and communication technology (e.g., hacking, spamming, consumer fraud, virus setting, intrusion); identify ways of addressing those risks.
- Demonstrate understanding for the process of copyrighting own work.
- Use programs and Internet sites responsibly, efficiently, and ethically.
- Serve as a mentor for others who want to use information technology.

<b>Standard 4: Pursue personal and aesthetic growth.</b>
<b>Strand 4.1: Skills</b>
<b>Indicator 4.1.1: Read, view, and listen for pleasure and personal growth.</b>
<ul style="list-style-type: none"> <li>• Read, view, and listen for personal enjoyment on a regular basis.</li> <li>• Participate in the social interchange of ideas through literary discussions, book clubs, and interest groups.</li> <li>• Read, view, and listen to learn, to solve problems, and to explore many different ideas.</li> <li>• Take advantage of opportunities available within the community for personal growth and learning, including classes, lectures, author presentations, museums, public library programming, and arts performances.</li> </ul>
<b>Indicator 4.1.2: Read widely and fluently to make connections with self, the world, and previous reading.</b>
<ul style="list-style-type: none"> <li>• Read, view and use literature (both fiction and nonfiction) to enrich understanding of real-world concepts.</li> <li>• Derive multiple perspectives on the same themes by comparing across different works.</li> <li>• Read widely to develop a global perspective and understand different cultural contexts.</li> <li>• Read to support and challenge own point of view.</li> </ul>
<b>Indicator 4.1.3: Respond to literature and creative expressions of ideas in various formats and genres.</b>
<ul style="list-style-type: none"> <li>• Express new ideas and connect to the human experience through information presented in various formats.</li> <li>• Identify universal themes in literature and different cultural approaches to those themes.</li> <li>• Share reading experiences in variety of ways and formats.</li> </ul>
<b>Indicator 4.1.4: Seek information for personal learning in a variety of formats and genres.</b>
<ul style="list-style-type: none"> <li>• Explore real-world genres as well as favorite genres and authors (movie reviews, editorials, consumer reports, game tips and strategies, career information).</li> <li>• Set reading goals and maintain a personal reading list.</li> <li>• Find information about personal interests independently, using the same criteria and strategies used for academic information seeking.</li> </ul>
<b>Indicator 4.1.5: Connect ideas to own interests and previous knowledge and experience.</b>
<ul style="list-style-type: none"> <li>• Connect new ideas/understandings to future uses – college, career, personal life.</li> <li>• Reflect on changes in personal goals, reading preferences, personal interests, and knowledge base over the previous four years.</li> </ul>
<b>Indicator 4.1.6: Organize personal knowledge in a way that can be called upon easily.</b>
<ul style="list-style-type: none"> <li>• Connect new information to ideas previously learned by developing graphic organizers and taxonomies to link large concepts to related details.</li> <li>• Remember the main ideas by seeing the pattern they present (e.g., cause and effect, growth or change over time).</li> <li>• Standardize personal system of note-taking so that it incorporates the main ideas and personal responses (emotional reactions, questions).</li> </ul>
<b>Indicator 4.1.7: Use social networks and information tools to gather and share information.</b>
<ul style="list-style-type: none"> <li>• Address real-world problems and issues by using information and communication technology tools to gather, evaluate, and use information from different sources, analyze findings, draw conclusions, and create solutions.</li> <li>• Use telecommunication to search for and identify potential work, college, or other opportunities.</li> <li>• Participate in the social interchange of ideas through book discussions, interest groups, and online sharing.</li> <li>• Apply production strategies and technology tools to design products to meet personal needs.</li> <li>• Participate in social networks responsibly and safely.</li> <li>• Use social tools to share and collaborate with others (e.g., interactive Web 2.0 tools and technologies).</li> </ul>
<b>Indicator 4.1.8: Use creative and artistic formats to express personal learning.</b>

- Create original products using multiple formats.
- Pursue creative expressions of information in the community (public library, arts centers, museums).

## Action Example: Grades 11-12

**GRADE: 11 & 12**

**LIBRARY CONTEXT:**

- ☐ Fixed    ☒ Flexible    ☐ Combination    ☐ Individualized Instruction
- ☐ Stand-alone lesson    ☐ Lesson in a unit    ☒ Multiple lessons in a unit

**COLLABORATION CONTINUUM:**

- ☐ None    ☐ Limited    ☐ Moderate    ☒ Intensive

**CONTENT TOPIC:** Relationship between a culture and its folklore.

**STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS**

**Standard: 4** Pursue personal and aesthetic growth

**Skills Indicator: 4.1.3** Respond to literature and creative expressions of ideas in various formats and genres.

**Benchmark(s):**

- Express new ideas and connect to the human experience through information presented in various formats.
- Identify universal themes in literature and different cultural approaches to those themes.
- Share reading experiences in variety of ways and formats.

**Dispositions Indicator(s):**

**3.2.3** Demonstrate teamwork by working productively with others.

**Responsibilities Indicator(s):**

**3.3.7** Respect the principles of intellectual freedom.

**Self-Assessment Strategies Indicator(s):**

**2.4.2** Reflect on systematic process, and assess for completeness of investigation.

**SCENARIO:**

*A world literature teacher emails the SLMS asking for a time to plan and schedule her classes into the library for the folktale unit. She and the SLMS have worked on this unit for the past two years so this session will be devoted to mapping out the visits to the library and going over changes made during the evaluation at the conclusion of the unit last year. They set a time to plan.*

*The focus of the unit is to highlight the relationship between a culture and its stories. For this unit, the students read folktales from a particular culture, identify the components of the society through the folktales, and conduct additional research on the culture. Then, with a partner, they write an original folktale that incorporates the characteristics of a folktale and what they have learned about that culture. In the past, the final project was a slide presentation or a play based on the folktale.*

*During the planning session, the teacher and the SLMS start by reviewing the unit and determining the length of time the classes will need to meet in the library. These are juniors and seniors who have had several research experiences in the library. However, the teacher feels that they still need some instruction on effective searches using the online databases and choosing the best websites for the information needed. Instruction in the classroom will focus on characteristics of folktales, determining the common components of a culture (morals, values, way of life, etc.), developing questions, and MLA format for the works cited. The SLMS will focus on the available resources for the project, search strategies for online databases, evaluating websites, and act as a consultant in the research process.*

*The teacher has expressed some dissatisfaction with the final products in the previous year. The SLMS (who has been advocating the use of picture books in the classroom) suggests that a picture book would be a good product for this type of assignment. She offers to work with the students as they write and illustrate a picture book version of their original folktale. The teacher agrees that a picture book might prove more interesting to the students, and would like to try it as a product for this year.*

*They decide that six days in the library will be sufficient for this unit and set the schedule. They also schedule a second planning session to review the plans for each day in the library, design exit passes to assess student progress, and determine the criteria for rubrics to assess note-taking, the final product, and working with a partner.*

#### **CONNECTION TO LOCAL OR STATE**

(List here relevant content, information literacy, and technology standards)

- Content Standard for Grade 11 Language Arts: Describe literary contributions of various cultures
- Content Standard for Grade 12 Language Arts: Compare and contrast the literary contributions of various cultures

#### **OVERVIEW:**

Juniors and seniors in a world literature class examine world cultures through the lens of a culture's folktales. The essential question is: How do folktales reflect a country's culture? In particular, the students (1) analyze how folktales convey a society's morals and values, and (2) apply their knowledge by creating a literary piece in the folktale genre that reflects aspects of the culture.

#### **FINAL PRODUCT:**

Students collaborate on the creation of an original folktale that incorporates the values of a particular cultural group and embodies elements of the folktale genre. They share their work with the class as a slide presentation, a picture book, or a play.

#### **LIBRARY LESSON(S):**

Students learn to locate folktales, find information in online databases and websites about a specific cultural group, and create picture books from their original folktales.

**ESTIMATED LESSON TIME:**

The classes will be in the library for six sessions. The lessons taught by the SLMS will range in length from 10 minutes to 30 minutes.

**ASSESSMENT****• Product**

- Teacher, SLMS, and students use instructor-created rubrics to assess the folktales and the picture book. Criteria used to examine the quality of the folktales include use of literary elements and motifs, development of story sense, and incorporation of cultural elements. Criteria used to examine the quality of the picture books will include several broad areas such as organization of content, creative interpretation of material, and audience appeal and appropriateness.

**• Process**

- Teacher and SLMS examine student notes, exit passes, website evaluations, and works cited to determine whether (1) information gathered uses a variety of sources, (2) notes accurately reflect cultural components, (3) websites have been evaluated to meet criteria for acceptable websites, and (4) works cited meet requirements for number and types of sources and correctly follows MLA format.

**• Student self-questioning**

- Do the notes that I took while reading my six folktales accurately reflect the components of my culture?
- Do the notes that I took during my research on my culture accurately answer my questions?
- Did I make good choices in the sources of information I used including the websites?
- Do my citations follow MLA format?
- Does my final product include the characteristics of a folktale, and include cultural components?
- How well did I contribute to the creation of the final product?
- How well did I work with my partner?

**INSTRUCTIONAL PLAN****• Resources students will use:**

- ☒ Online subscription database(s)   ☒ Web sites   ☒ Books   ☒ Reference
- ☐ Nonprint   ☐ Periodicals/newspapers
- ☐ Other (list):

**• Instruction/activities**

- Direct instruction:
  - **Folklore Index** - read a folktale from a Native American tribe to the class. Discuss what can be learned about the culture and identify the characteristics of a folktale.
  - **Search Strategies for online databases** – review the available online databases that will be appropriate for this assignment. Provide students with a



handout highlighting search strategy tips (Boolean operators, nesting, limiting, expanding, keyword vs. subject heading, sorting results, etc.).

- **Evaluation of Websites** – introduce the website evaluation rubric and discuss the criteria for choosing an appropriate website.

- **Characteristics of picture books** – using the folktale that was read when introducing the assignment, identify the characteristics of a picture book (abundance of illustrations, importance of illustrations in telling the story, less text, author notes, etc.)

- Modeling and guided practice:

- **Folklore Index** - introduce the library's folklore index which identifies folktales, their cultural group/native country, and the collection where the folktale can be found.

- **Search Strategies for online databases** – demonstrate the various strategies from the handout on one of the subscription databases to locate articles about the same Native American tribe.

- **Evaluation of Websites** – using the website evaluation rubric, the students as a class rate three websites on the Native American culture group used previously.

- **Characteristics of picture books** – students work with their partner to locate a folktale picture book from their chosen culture. After they have identified the characteristics, they share their findings with the other students at their table.

- Independent practice:

- **Folklore Index** - students locate and read six folktales representing the culture/country they have chosen to investigate.

- **Search Strategies for online databases** – students locate articles on their chosen culture using the demonstrated strategies. The students have the remainder of the class period plus the next day to get their articles.

- **Evaluation of Websites** – students locate websites on their chosen culture and rate the sites using the website evaluation rubric. Based on their ratings, they choose the best two, and take notes to answer their questions.

- **Characteristics of picture books** – based on the information gathered and the folktales that they read about their chosen culture, the students write and illustrate an original folktale in the picture book format.

- Sharing and reflecting:

- **Folklore Index** – students work with their partner to compare the folktales they have located and read. They identify common components (morals, values, way of life, etc.) of their chosen cultural group.

- **Search Strategies for online databases** – students complete an exit pass at the end of the two class periods. The exit pass lists each article and the search strategy that got them to the article. The students also share the articles with their partner and compare the information gathered. They look for gaps and misinformation.

- **Evaluation of Websites** – students turn in the website evaluation rubrics, indicating the reasons for rejecting or choosing each of the websites they

located. They share the information they gathered from their chosen two with their partner looking for gaps and misinformation.

- **Characteristics of picture books** - The original picture books will be read to the class by the author and illustrator. The class will have an opportunity to respond by identifying the cultural components and the characteristics of a picture book. The students will be asked to write a reflection on the process of writing and illustrating an original folktale, how well they incorporated the cultural components into their folktale, and working with a partner to complete the project.

## 7. Action Examples Template

**GRADE:**

**LIBRARY CONTEXT:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> Fixed              | <input type="checkbox"/> Flexible         | <input type="checkbox"/> Combination                | <input type="checkbox"/> Individualized Instruction |
| <input type="checkbox"/> Stand-alone lesson | <input type="checkbox"/> Lesson in a unit | <input type="checkbox"/> Multiple lessons in a unit |   |

**COLLABORATION CONTINUUM:**

- |                               |                                  |                                   |                                    |
|-------------------------------|----------------------------------|-----------------------------------|------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Limited | <input type="checkbox"/> Moderate | <input type="checkbox"/> Intensive |
|-------------------------------|----------------------------------|-----------------------------------|------------------------------------|

**CONTENT TOPIC:**

***STANDARDS FOR THE 21<sup>ST</sup>-CENTURY LEARNER GOALS***  
**Standard:**

**Skills Indicator(s):**  
**Benchmark(s):**

**Dispositions Indicator(s):**

**Responsibilities Indicator(s):**

**Self-Assessment Strategies Indicator(s):**

**SCENARIO:**

**CONNECTION TO LOCAL OR STATE STANDARDS**

(List here relevant content, information literacy, and technology standards)

**OVERVIEW:**

**FINAL PRODUCT:**

**LIBRARY LESSON(S):**

**ESTIMATED LESSON TIME:**

**ASSESSMENT**

- **Product**
- **Process**
- **Student self-questioning**

## **INSTRUCTIONAL PLAN**

- **Resources students will use:**

- ☐ Online subscription database(s)   ☐ Web sites   ☐ Books   ☐ Reference
- ☐ Nonprint   ☐ Periodicals/newspapers
- ☐ Other (list):

- **Instruction/activities**

- **Direct instruction:**
- **Modeling and guided practice:**
- **Independent practice:**
- **Sharing and reflecting:**

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